

SOCIO-ECOLOGICAL ADULT LEARNING

TOWARD REAL COMMUNITIES

Two Case Studies:

Venezuela (1977-1990) and New Zealand (1984-1990)

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I dedicate this thesis
to the memory of my two Grandmothers

Matilde Mendez Colmenares and Maria Suarez Borjas

"You planted a dream in me.

It guides me wherever I'll be, whatever I'll do,
through my life.

One day I'll make it realized"

(From a Third World woman, participant-learner in the
"Productive Eco-Systems Course",
in a First World country).

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ABSTRACT

This thesis is a quest for a theory of change towards a non-hierarchical society where People could live in harmony with themselves, with others and with Nature. The quest involves the integration of a theory of adult learning with a theory of change, guided by ecological consciousness and wisdom. The conceptual integration will be named "Real Ecology Adult Learning" or REAL.

Two main justifications for the above articulation, are: firstly, there is a need for the communities to challenge and to halt the hierarchical roots of social oppression and the destruction of the Eco-sphere (the thin layer surrounding the Earth which sustains the totality of Life in the planet). Secondly, there is a need for a "down to earth" theory useful to people engaged in adult and community education which confronts the difficulties of identifying and selecting an appropriate theory of change. The difficulties arise from the current confusion between the two major conceptual frameworks: the "Environmental Theory" and the "Ecological Theory". This thesis (centered on gender analysis of hierarchy) scrutinizes their conceptual differences within the global context of the "hierarchy of nations" based on the sexual International Division of Labour.

The "Introduction" examines the nature of REAL. It explains the reasons why it is necessary to conceive a theory on social, cultural and ethical change guided by eco-feminist knowledge, consciousness and wisdom. It identifies the difficulties of conceptual discrimination between multiple theories and enables the selection of a theory that goes beyond the reformist constraints of "Environmentalism Theory" and the internal contradictions of "Ecological Theory".

The first chapter describes a case-study of ecological adult learning in a Third World Country: Venezuela (1977-1990). There, theory and practice are being incorporated by the community to meet basic needs in an environment of scarcity. The second chapter evaluates a case study in the environment of abundance and over-consumption of a First World country - New Zealand (1982-1990) -, under the rule of the Fourth Labour Government. It focuses on the transition: from a welfare state into a competitive free-market society manipulated by the neo-liberal financial New Right. In both case-studies, the achievements as well as the constraints and difficulties encountered at ideological and practical levels, are described.

Chapter Three follows the development of a theory of change. Grounded on the practical experiences of the 1970's and the 1980's, it attempts to find new conceptual guidelines for future educational work and action in the

community. Firstly, it highlights the differences between two major theories that tend to be confused: "Environmental Theory" (which goals for change are low) and "Ecological Theory" which aims to a total transformation guided by ecological wisdom. The first one is the context of "Adult Environmental Education" (AEE).

The development of REAL theory continues with the analysis of three conceptual frameworks: the first two are studied in the context of the "Environmental Theory". They are: the "Free-Market Environmentalism" of the Neo-liberal New Right, and the Neo-Marxist "Post-Industrial Environmentalism". The third framework of "Eco-feminism" is examined in the context of the "Ecological Theory". To analyse the three conceptual frameworks, their values, assumptions and main arguments, they are compared to try to identify similarities and differences between them and to establish their internal contradictions and ambiguities. Eventually, one framework is selected and integrated with a particular theory of Adult Learning, to become REAL.

Finally, Chapter Four offers guidelines for the practical implementation of REAL. These guidelines, organized as a programme, are based on a theory grounded on evaluation of past experiences which is integrated with other significant key theories. Real Ecology Adult Learning aims to challenge and to change the hierarchical roots of exploitation, domination and manipulation of

People and Nature in 1990 and beyond, towards the new millennia.

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Thanks to my organic, bio-dynamic and social-ecology teachers in the U.S.A. (1976-1977) who inspired and encouraged me to put knowledge into practice, back in the Third World where I came from: Mr. Lee Mc Comb (Organic Grower and Pioneer. Leesburg, Florida), Mr. James H. Fowler (Organic Grower and Pioneer. Denver Free University, Colorado), Mr. Dick Falkestein, Jeff Chandler and Robby Halpern (Bio-Dynamic and B.D. French Intensive Teachers. Koinonia Community. Baltimore, Maryland) and Mr. Charles Woodard (Biological Agriculture and Social Ecology. Institute for Social Ecology. Goddard College. Plainfield, Vermont).

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Thanks to Adrienne Alton Lee, Prue Densen and the group of women of "Education 613: Feminist Issues in Education" at the University of Canterbury (Christchurch, New Zealand, 1989), because - since that learning experience - I became more aware of the "invisibility" of women, critically conscious of the importance of gender analysis and explorer of the wide universe of theories of patriarchy.

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INTRODUCTION

The general conceptual framework of this thesis is based on the analysis of the "patriarchal" roots of oppression of People and the destruction of Nature. Firstly, I want to establish the difference between the "gender-free" analysis and the "feminist" analysis. Whereas the "gender analysis" focuses on the logic and concrete mechanisms of "patriarchy" - as any form of male domination and male hierarchical power and control - on the contrary, a "gender-free" analysis avoids the above sexual approach, making invisible the concrete reality of "patriarchy". I understand "patriarchy" as any system¹ which logic serves to the perpetuation of any form of hierarchy and discrimination on the grounds of any differences between people². In the thesis, the "patriarchal thought" is understood as a set of assumptions, beliefs and values which implies a concrete world of domination, manipulation and exploitation of People - specially Women and Children - and Nature³. At this point, it is important to define the particular meaning that the concept of "Exploitation" will have in

¹ Inter-personal, family, economic, ethnic, social, cultural, economic, political, scientific, religious, military...

² Such as economic, sexual, age and ethnic, for example.

³ See the "Eco-feminist" analysis of the Global System of Patriarchy, in Chapter Three.

this thesis. It is a term deliberately avoided by feminists engaged in liberal, bio-psychological and functional- cultural frameworks as well as by socialist and radical feminists, since it is commonly understood as the Marxist class-biased, economic-biased and gender-blind concept of: "...appropriation of surplus labour by the capitalists"¹. I will adopt instead, the definition of Maria Mies of "exploitation", which means...

...that somebody gains something by robbing someone else or living at the expense of someone else. It is bound up with the emergence of men's dominance over women and the dominance of one class over others, or one people over others.²

The flexibility of the concept "dominance" in the above paragraph also allows a margin for the interpretation of "dominance" as "power". The concept of "Power" in this thesis not only means to hold economic, political and social authority, but any relationships of command and obedience or rewards and punishment or manipulation of any kind between People. "Power" is intended to submit the will, to make the People - individually or collectively - obedient and submissive. Also, the flexibility of the concept "People" in this thesis allows a margin for interpreting hierarchical or bureaucratic lines of women exercising power over other women and men, as well as the analysis of authoritarian relationships at the level of family, groups and communities; for example, authoritarianism of adults over

¹ Mies, Patriarchy and Accumulation on a World Scale, p. 36

² Mies, *Opus cit.*, p. 36

the children, the young and the old people.

This thesis is a quest for a theory of social, cultural and ethical change guided by individual and collective ecological consciousness and wisdom that leads towards a society of non-hierarchical communities where People can "...live in harmony with themselves with others and with Nature."¹ The quest draws the conceptual unification of an "adult learning" theory with an "ecological" theory into a new integrative conception which I will named "Real Ecology Adult Learning" or REAL. The REAL quest flows within the context of the unified and interdependent relationships: "Nature-Ecosphere"- "Humans-Culture-Society"- "Education-Learning-Empowerment of People".

Education is political, learning is political and the life of the individual is also political. Hence, "empowerment" of people in this thesis is understood as:

"...a spectrum of political activity ranging from acts of individual resistance to mass political mobilization that challenge the basic power relations in our society."²

¹ Suarez, O., Proposal for an Ecological Educational Programme on a National Scale to the Governor of the Federal District, Canoabo, Carabobo state. Venezuela, May 1979.

Suarez, O: La Basura es un Tesoro. (Garbage is a Treasure: Recycling Culture, Natural, Non-Polluting Agriculture and other Ways Toward an Ecological Society), p.16 Caracas, Venezuela, 1982.

² Bookman & Sandri, Women and the Politics of Empowerment, Introduction, p.4.

The major aim of the thesis is to explore different theories in adult education and ecology, appropriate to the complex reality of the actual decade, in order to fulfil the needs of empowerment of adults and the community.

The first problem to overcome is that similar terms or concepts used in a particular theory, means something totally different in the context of another theory. For example, concepts related to the "Environmental Theory" tend to be confused with those of the "Ecological Theory"; or concepts of "scientific ecology" such as "ecological hierarchies" serve as the logic justification of social hierarchy which REAL opposes; there is also a conflicting debate between different "ecologists": the "social", the "deep" and many others. These three areas of confusion must be carefully scrutinized, since...

"The deepening divisions between these approaches, with their different theoretical assumptions, and political styles threatens to block the essential work of movement-building and the development of more lasting alliances among people dedicated to saving the earth and creating more ecologically sound ways to live upon."¹

...although the thesis will explore "the deepening divisions", it will also uncover the myth of the abused slogan "to save the earth" which is now favoured by the politicians manipulating a "green" image to impress the voters and by the "green business" which has found that

¹ Tokar, Exploring The New Ecologies. Social Ecology, Deep Ecology and the Future of Green Political Thought, p. 31
In: Alternatives, Vol 15 n0 4, 1988.

"to save the earth" is a profitable venture.

Then, since the process of identifying, discriminating and selecting a framework raises major difficulties on a conceptual level, what is the best language to use? Theories of adult and community education use generalizing ambiguous concepts such as "education", "empowerment", "participation" and "development". The thesis frequently uses many generalizing terms such as: "eco-feminism", "patriarchy", "organic", "exploitation" and "hierarchy". Ambiguous concepts are deliberately avoided or specially scrutinized.

The analysis of the concrete and local learning needs of the community within both, the global neo-colonial context of hierarchy and the destruction of Nature and People, will also raise a series of problems for the articulation of a REAL theory. It is required that several key lines of thought must be found, developed and coherently integrated on:

- a) Nature and human nature.
- b) The understanding of hierarchy, patriarchy, power, authority and control.
- c) Possible models of ecological communities.
- d) Processes of adult and community learning, and
- e) Processes of change towards freedom.

In the thesis these key lines of thought will be used for the theoretical basis of REAL and integration will evolve as follows:

Firstly, the "General Conceptual Framework of the Thesis" challenges any form of hierarchy and discrimination based on economic, political and social grounds, on sexism, racism and ageism and opposes any form of domination, oppression and manipulation of People and Nature. Secondly, it is also necessary to analyse the practice of adult and community education and learning. To do this the thesis will present two past experiences on ecological adult learning, focusing on some arguments on Nature, society, culture and human nature. It will also argue on institutional and political control of adult education programmes and on community and personal actions guided by social, cultural and ethical ecological consciousness.

The thesis starts with two case-studies of ecological adult learning and ecological education for the community: in Chapter I, Venezuela (1977-1990), and in Chapter II, New Zealand (1982-1990). The style I have chosen for the description of the two case studies - in Venezuela and in New Zealand - is narrative, giving a detailed description of *what happened* on personal, group and community levels. At the end of each case study I will include critical analysis and some partial conclusions.

The description-analysis of the two case-studies is presented according to the following order: "Context", "Preparation", "Organization", "Action", "Reaction", and "Consequences". This order has been established adopting some of the "ten points" for the presentation of case-studies of non-violent actions of Joan V. Bondurant.¹ The two case studies are described in two "capitalist" and "democratic" countries, within the global context of the Sexual International Division of Labour (SIDL) and the neo-colonial hierarchy of nations.

The first case study is located in Venezuela, which belongs to the "Trade Union of the Poor", named the "Group of 77" of Third World countries "...that formed a coalition at the United Nations Conference of Trade and Development in 1964.", although the term is still used to define "...the caucus of all developing nations in the United nations".² The "Group of 77" sponsored a set of proposals in the attempts "...to redress the international economic imbalance felt by the developing nations".³ Venezuela is also a member of the Organization of Petroleum Exporting Countries (OPEC), established in 1961.

¹ See "An Analysis of Five Satyagraha Campaigns" of Bondurant, Conquest of Violence. The Gandhian Philosophy of Conflict, p. 45-46

² The Hunger Project, Ending Hunger: An Idea Whose Time Has Come, p. 409

³ The Hunger Project, Opus cit,. p.410

New Zealand, instead, belongs to the privileged category of the so-called "First World countries" which are wealthy, rich and considered industrially and technologically "developed" since "...with under a fifth of the world's population, enjoys two thirds of world income."¹ New Zealand is a member of the Organization for Economic Cooperation and Development (OECD), which purpose is "...to further economic growth and to contribute to the development of the world economy..."² This case-study is seen within the economic and ideological context of the global, financial New Right (NR), in Chapter II.

In the current decade REAL participants will become aware of the nature, power and control of the NR: not only analysing its different schools of thought, but its economic basis rooted on Transnational Corporations (TNC), the global business and the international monetary system. On a national level all around the world, the financial NR ideologically influences political parties in government and in opposition through "free-market" inclined politicians, in order to control internal and local processes of policy-making of the nation-states. Their goal is to achieve anarchist-capitalism for the global free-market forces to act in each country with

¹ Myers, Edit. The Gaia Atlas of Planet Management, p. 210.

² The Hunger Project, Ending Hunger, p. 411

minimum or no state interference.

On an international level, the New Right also manipulates at high levels of international legislation, rising blocks of power, intervention and control against other blocks¹ in order to keep the global economic system growing and expanding for their own commercial benefit. The manipulation of the global economy is done through systems of international "cooperation" between rich and poor countries, through institutions such as the International Bank for Reconstruction and Development (World Bank) and the International Monetary Fund. The financial New Right is trying to perpetuate the patriarchal neo-colonial system² as the foundation of the hierarchy of nations that supports an internationally wealthy elite acting behind Transnational Corporations. For this purpose, one of the more important strategies of the financial New Right in the current decade is to adopt a "green environmentalist" image.

Facing the complexities and paradoxes of the actual decade - in which the "green" and the "environmental" concerns and struggles of the past are now commercially and politically manipulated - Chapter III explores different theories. To begin with, it is necessary to discriminate the differences between two major frameworks

¹ Ray, Global Politics, p. 413

² See the following "'General Conceptual Framework of the Thesis"

which tend to be confused: the "Environmental Theory" (which is the reformist context of "Adult Environmental Education") and the "Ecological Theory" (which is the context from which the two case-studies in adult education evolved in the decades of the 1970's and 1980's) in Venezuela and in New Zealand.

In the quest for a theory of change, the first line of analysis in Chapter III, focuses on the definition, context and development of "Environmental Theory", followed by the analysis of two "Environmentalism" frameworks. Firstly, the framework of "Free-market Environmentalism" which continues the liberal-capitalist tradition. Secondly, the analysis of "Socialist Environmentalism" - which continues the Marxist-socialist tradition - revealing two contradictory trends: "From Red to Green" and "From Green to Red".

The analysis of the "Environmental Theory" continues with the research of "International Programmes of Adult Environmental Education" with the presentation of case studies in capitalist as well as in socialist countries. In order to identify their goals for change and the modalities of control of these programmes, I have adopted the "Typology of Adult Education Programmes" of Poulston & Altenbaugh which identifies several categories of "Goals for Change" and "Controls".¹ The "Typology"

¹ Poulston & Altenbaugh, Adult Education in Radical US Social and Ethnic Movements From case Studies to Typology to Explanation, p. 114-137 In: Radical Approaches to Adult

enables to identify the nature of "Adult Environmental Education" incorporated into Adult Education Programmes, taking place in the types:

- 1) "Conventional",
- 2) "Consumer" and,
- 5) "Reformist".

While other theories are valued as types:

- 3) "Radical Humanist" or,
- 4) "Radical Structuralist".

The chapter will present examples of "Adult Environmental Education Programmes" according to the above typology and integrated with the "Adult Education Theory" of Elias & Merriam.¹ I will argue that educational philosophies considered "radical" in the past have become today an instrument for conformism and passiveness, hence, contributing to the perpetuation of the current hierarchical society. I will argue that it is necessary to search for a new conceptualization beyond the biases of the radical, anarchist-capitalist and utopian traditions of adult and community education. Once "Environmental Theory" is studied, it follows the "Ecological Theory" as the general context for "Eco-feminism".

Education" A Reader

¹ Elias, J.L. and Merriam, R. Philosophical Foundations of Adult Education, Robt E Kroieger Publishing Co. N.Y., 1980

"Ecological Theory" is a general and ambiguous concept which involves many conceptual trends. A summary of "Ecological Theory" is included, focusing on the internal tensions and contradictions between the different ecological tendencies. The analysis of "Ecological Theory" will continue, focusing on Eco-feminism. Firstly, I will establish the different conceptual trends on Eco-feminism including the critique of the conceptual identification "Women-Nature". Secondly, I will focus on the gender analysis of society arguing that the neo-colonial hierarchy of nations is based on the Sexual International Division of Labour. I will explore the roots of hierarchical systems of exploitation, domination, oppression and manipulation of People and Nature.

The eco-feminist analysis focuses on four conceptual keys to identify patriarchy in relationship - or not - with the capitalist system, including the Sexual International Division of Labour (SIDL) and the social and cultural male coerciveness, authoritarianism and sexual violence on a global scale. This "patriarchal state of the planet" will be challenged from the non-hierarchical and eco-feminist perspective. Two examples of hierarchical thought are chosen for the discussion: firstly the "Ecological Hierarchies" of Scientific Ecology and the gender analysis of the "Global Hierarchy of Nations". It discusses the symbolic representation of the patriarchal dualistic and oppositional thought which

logic serves to perpetuate the domination, exploitation and manipulation of People (especially Women and Children) and Nature. Hierarchical pyramids will be used in the thesis to represent: the Global Economic System from a "First-Third World" perspective, the Sexual International Division of Labour, the hierarchical system of neo-liberal New Right and the patriarchal system of domination and exploitation of women and children on a global scale. I have chosen these symbols to visually reinforce the hierarchical dualistic-oppositional thought of patriarchy which will be challenged from the REAL non-hierarchical perspective of eco-feminism.

Do the above three frameworks: "Free-market Environmentalism", "Socialist Environmentalism" and "Eco-feminism" have something to offer to REAL in 1990's? What criteria must be followed in order to select - or not - a theory of change appropriate to REAL? And how would REAL relate theory to policy and practical implementation? Once the three frameworks have been analyzed, one will be selected to be integrated with a theory of adult learning to become REAL.

At the end of the thesis a body of conclusions is presented. At that point, the thesis will have had articulated a REAL theoretical insight for the everyday learning process towards individual and collective ecological awareness, culture, ethics and wisdom. Towards actions of the community to challenge and to

change the patriarchal hierarchical roots of exploitation, manipulation and domination of People and Nature in the 1990s and beyond, towards the new millennia.

CHAPTER I

CASE STUDY 1: ECOLOGICAL ADULT LEARNING

VENEZUELA (1977-1990)

I. CONTEXT

In order to understand the Venezuelan educational process, it must be analyzed within the ecological, social, historical and political context of Venezuela, its Nature and its People.

1) Ecological context

Venezuela, a country of 916.700 Kms², is located in the western hemisphere just north of the Equator at the northern centre of South America.¹ Venezuelan northern coast opens to the warm eco-region of the Caribbean Sea and the Orinoco River disperses itself and widens as a fan into the Delta, blending its waters with those of the Atlantic Ocean. The south-western mountains - some

¹ The Venezuelan limits with Colombia and with Guyana have been a constant source of dispute. For example, West of Venezuela there is a territory of 167, 830 Kms² along the Esequibo river which limits were established in times of the Great Colombia, around 1818. Later, between 1841-1844, the British Empire tried to expand the colony of Guyana sending explorers to change the original limits and since then a conflict for the Esequibo Territory arouse between Venezuela and the "British" Guyana -the now "Independent", Guyana.



permanently covered with snow - are the beginning of the Andes which continues along the western side of the continent. A southern tropical jungle expands into the Amazonian region. The hydrographic and topographic characteristics of Venezuela, results in a rich diversity of climates and micro-climates; from the very cold to the very hot. The diverse ecological niches containing an abundance of Life forms is inter-connected in highly complex eco-systems. It is here where the indigenous human roots of the Venezuelan people appear. Those roots are of highly significant for Venezuelan participants involved in ecological adult learning who are trying to research the vestiges of indigenous cultures of Latin American today.

The vestiges of a rich diversity of cultures that humans developed through thousands of years before the Spanish conquered and colonized South America, reflects their deep identification with the rich diversity of Nature: "Humanity, in effect, becomes the potential voice of nature rendered self-conscious and self-formative".¹

Humans living in pre-historic times in the territory known today as "Venezuela" did not organize their societies based on hierarchy and slavery like the civilizations of the Incas in Peru, the Mayas in Yucatan or the Aztecs in Mexico. Four pre-historical cultures

¹ Bookchin, M. , Remaking Society, p. 201

existed in Venezuela; they are known as: the "Andean Timote-Cuica" who were culturally influenced by the "Chibchas", an advanced agricultural society of Central America, Colombia and Ecuador; the "Caribbeans" and the "Arawaks" were nomadic cultures of hunters, fishers and gatherers; and the "Palaphitic culture" were the builders of pole houses raised above the waters of Maracaibo Lake. When the Spanish explorers saw these pole houses, they named "their" new territory the name "Venezuela" meaning "little Venice".

(2) Socio-Historical-context

Venezuelan history must be analyzed within the context of Latin American history:

Latin America is the region of open veins. Everything, from the discovery until our times, has always been transmuted into European-or later United States-capital, and as such has accumulated in distant centers of power. Everything: the soil, its fruits and its mineral-rich depths, the people and their capacity to work and to consume, natural resources and human resources. Production methods and class structure have been successively determined from outside for each area, by meshing it into the universal gearbox of capitalism.¹

Christopher Columbus, financed by the Spanish Queen "Isabel the Catholic" for the imperial enterprise of finding a shortest route to India in search for gold and spices, repeatedly travelled to small and remote islands where people welcomed the visitors with pearls and gold. The fourth trip resulted in the discovery of continental South America via the west coast of Venezuela. As Columbus falsely believed he had arrive in India, he

¹ Galeano, E., The Open Veins of Latin America, p. 12

named the native people "indians". The Spanish firstly became "discoverers", secondly "explorers", then "conquerors" and finally, colonizers and rulers.

Today, after 498 years of Spanish colonialism and First World neo-colonialism, approximately 100.000 people, descendants of the indigenous inhabitants of Venezuela before the arrival of the Spanish, represent 1 % of the total population.¹ Some tribes are still surviving in different regions, some of them living with no or minimum interference from the capitalist-industrial society characterized by commercial consumerism and production of waste. Some tribes living in the forest have developed a culture of seasonal cycles of gathering and hunting for their food in harmonious identification with the local Nature.

Venezuelan society grew into a Spanish colony through a violent history of massacres and war, since the foundation of the first fourteen cities (1510-1593). The conquering and colonization was based on the exploitation of the Native People, the enslavement of African People and the domination of Nature by the Spanish, for growing their never-ending mono-crops of cocoa and coffee, exported to please the palates of Europe. Venezuelans today, are the result of almost 500 years of combined genetic, cultural and social heritage of its indigenous

¹ Blank, D.E. Politics in Venezuela , p. 61

People ("indians"), the Spanish conquerors and the Africans: 70 % Venezuelans are "Mestizos" (Offspring of native "Indians" and European) and "Mulatos" (Offspring of Black Africans and European); 20 % are white and 10% are Black, descends of African Slaves and 1 % are "indios" (indigenous).¹ The society continued to grow though the 17th and 18th centuries, still based on the cruel enslaved agricultural labour under the rule of the oligarchy or "Great Cacaos". Traders, moneylenders, bankers and merchants, all accumulated capital with the exports of "raw materials" to Europe. After 1810, it started a thirty years of war under the command of Simon Bolivar which culminated with the Declaration of Independence (19-4-1810). The Venezuelan nation was established as the "Fatherland":

The most pompous republican slogans of the European bourgeoisie came into fashion as our countries placed themselves at the service of English industrialists and French thinkers. But what sort of 'national bourgeoisie' was ours, composed of landlords, big wheelers, and dealers and speculators, frock coated politicians, and intellectuals of borrowed cultures? Latin America quickly gave birth to bourgeois constitutions well varnished with liberalism...²

After the discovery of oil in 1914, Venezuela came under the rule of one of the most cruel dictators of all times, Juan Vicente Gomez ³, who took Venezuela into neo-colonial industrial capitalism. The dictator gave perpetual concessions for oil exploitation to North

¹ Blank, D.E. Politics in Venezuela, p.61

² Galeano, Opus cit., p.130

³ Pike, F.B. Spanish America 1900-1970. Tradition and Social Innovation , p.76-77

American companies and between 1920' and the 1930s: "Nearly half of the country's oil at this time was produced by the Creole Petroleum Corporation, a subsidiary of Standard Oil of New Jersey"¹. Millions of people migrated from the impoverished rural areas to the main cities of Caracas, Maracay, Valencia and Maracaibo. Later, with the discovery of iron in the 50's, more people migrated to the southern cities of Ciudad Bolivar and Puerto Ordaz. Many more millions came from all over the world and stayed in Venezuela, attracted by its economic growth. Today the economy is mainly based on mineral exploitation for the export of oil, gold, diamonds, charcoal, iron ore, cement and natural gas. Venezuela became one of the main oil exporting countries, and enriched immensely the fortune of the Rockefellers:

Standard Oil of New Jersey, a typical multinational corporation, earns its biggest profits abroad, with Latin America bringing in more than the United States and Canada put together; south of the Rio Grande its profit rate is four times higher. In 1957, more than half of its global profits came from its Venezuelan affiliates accounted for half of Shell's world profits.²

The Venezuelan oil industry was nationalized on the 1st of January of 1976 but the dramatic decline of its economy immediately after, reflects its dependence on external global markets. Being a member of the Organization of Petroleum Exporting Countries (OPEC), the always indebted national economy is controlled from overseas by Transnational Corporations (TNC), the

¹ Pike, Opus cit., p. 76

² Galeano, Opus cit., p.174

International Monetary Fund and the World Bank. Venezuela went from the "golden era" of OPEC setting up a policy of high oil prices between 1973-1975, into economic bankruptcy in the 1980's. Currently, in 1990's, has an external debt of USA "...\$ 32.0 billion medium and long term (1988)"¹. The main challenge for the participants in ecological learning in Venezuela, is its "Made in U.S.A." consumer-waste society of 19. 263,376 inhabitants², whose living "standards" range from extreme wealth for the few and poverty for the many³. On one hand, the great majority of Venezuelans are struggling in the chaotic urban environments of luxurious cities surrounded by slums where People live in extreme conditions of poverty: almost 4 million live in the capital, Caracas⁴. While on the other hand, the lives of people in the rural areas are dominated by the agro-industry. As it will be analyzed, these areas are polluted by agrochemicals with its chemical poisoning of people and the irreversible destruction of the eco-systems.

¹ Central Intelligence Agency CIA, The World Fact Book, p. 315

² Data by July 1989. Central Intelligence Agency, The World Fact Book 1989, p.314

³ Penniman, H.R., "Venezuela at the Polls", p.59

⁴ See Burnet and Johnson, Political Forces in Latin America, p. 219

3) Political-Regional context

The territory of the Federal Republic of Venezuela is politically organized into 20 states, 2 Federal Territories, 1 Federal District - with Caracas as the capital city -, and 72 Federal Dependencies (Individual Islands). Following a succession of cruel military dictatorships alternated with the violent popular struggles for democracy in the 40's and the 50's, Venezuela became after 1958 a "stable" "Representative-Democratic" country. The origin of the political parties in Venezuela, started with a group of university students of middle and high socio-economic status known as "The Generation of 1928": they opposed the dictatorship of General Juan Vicente Gomez and, before he died, they became the leaders of the different political parties. After General Gomez death (17-12-1935) his follower, General Lopez Contreras, assumed the government trying to keep a moderate line between the elites protected by the dictator and those advocating for democracy. General Isaias Medina Angarita followed this government, permitting freedom of speech and the rise of the democratic forces, which partisans were trying to organize themselves around four new political organizations. However, politics in Venezuela became a succession of military dictatorships, followed by democratic governments, being the last dictator General Marcos Perez Jimenez who ruled the country until the popular civil uprising known as the "Revolution of the 23 of January", in 1958.

For the implementation of the electoral voting system, high levels of illiteracy in the adult population made necessary the use of specific colours to identify and symbolize each party beyond any doubt¹. Venezuelans have always elected their Presidents every 5 years through general elections which each follow six months of vehement electoral campaigns. Since 1958, although there are many political parties, all the presidents of Venezuela have been members from only two parties: the social democrats or "Democratic Action" (AD = White) and the social Christians (or "COPEY" = Green) . The main differences between the two main parties are as follows:

a) The "Democratic Action" Party AD Is similar to other parties in Latin America such as the "Popular Revolutionary American Alliance" APRA of Peru. AD is secular, modern, social-democratic, anti-communist and nationalistic. It is "popular", because the party integrated workers and peasants into social, political and economic reforms. After years of cruel military dictatorship between the 30's and the 40's, the Movement of Venezuelan Organization ORVE, emerged as a multi-class and populist party which later would unify with other organizations of the working class as the "only party of the left" or PDN. In 1941, it was changed into the

¹ Social Christian Party (COPEY)=green colour; Democratic Action (AD)=white colour; Movement Towards Socialism (MAS)=orange; Union of Republican Democrats (URD)=Yellow; Communist Party (PC)= Red; and many others.

populist, secular "Democratic Action" AD party which also would incorporate the peasants with plans for the "Agrarian Reform".

The "Democratic Action" AD party advocated socialist-reformist principles such as eliminating "latifundio" -or the landlord-feudal ownership of the land-, for which the state payed compensation to the owners; national campaigns against illiteracy; democratization and secularization of education; defense of the interests of the working class and organization of unions and syndicates; democracy and nationalism. These reforms made the party very popular between labour unions, syndicates and the peasantry. The party policy of AD which leaders spent many years in exile during three military dictatorships, evolved through different stages¹ and, since 1958....:

...eight areas are outlined: political, economic and fiscal, administrative, social, health and general assistance, agricultural, educational and administrative. Three identifiable strands run through the text of these discussions: political freedom and democratic government, advocacy of state planning in all areas, and state responsibility for the betterment of all segments of Venezuelan Society."²

¹ See: Penniman, Venezuela at the Polls; Burnett & Johnson, Chapter 8: Venezuela In : Political Forces in Latin America; Blank, Politics in Venezuela ; Martz and Myers, Venezuela, the Democratic experience.

² Martz, Accion Democratica. Evolution of a Modern Political Party in Venezuela , p. 228

The multi-class nature of the party gave origin to internal ideological contradictions and clashes between the leaders. The AD party was shaken with four divisions: (a) in 1960, the expulsion of the young leaders who will form the "Revolutionary Left Movement" (MIR); (b) in 1962, the moderates "old guard" in government, found the opposition of those that wanted to accelerate the reforms, including the leaders of the Peasants Federation. (c) in 1963, another division between the group trying to attract new partisans between the middle urban class, private business and the oligarchy and the group trying to keep AD as a popular party of workers and peasants. (d) in 1967, another internal division for leadership originated another party, the People's Electoral Movement or MEP. (e) AD in 1990, is a party of industrialist millionaires and the high middle professional class.

(b) The "Social Christian" Party "COPEY" After the death of General Gomez, the Social Christian leaders were initially in favour of the moderate-conservative line of the transitional government towards democracy of General Lopez Contreras. COPEY was formally organized as a party in 1936, linked with other international Social Christian parties all around the world, specially the German party... "as a quasi-falangist, ultra nationalistic student group violently opposed to the equally immoderate leftist leadership of the Federacion

Estudiantil Venezolana..."¹. The COPEY ideology has developed as other similar Christian Democratic parties in Europe, under the influence of Pope John XXIII. The International Catholic Church works ideologically in Venezuelan politics through a secret and strict hierarchy of middle and upper class known as the "Opus Dei" or "Work of God", through different political parties and specially through COPEY². Their slogans on "Social Justice" and of "Cambio" (Change) towards leftist nationalism and the leadership of their elegant, articulated and well-spoken leader, Rafael Caldera, gave Copey a new profile which grew in popularity: "He viewed industrialization as the driving motor of the national economy, implicitly regulating agricultural questions to a secondary position."³. COPEY universalist philosophy is based on "social justice" and "rights of the poor". Is a "social welfare", "conservative", "charitable" and highly Catholic, party.

c) Venezuelan Political Culture To live, work and act in Venezuela is to move within a "political culture"⁴, based on a conceptual framework of values, beliefs and assumptions that serves to perpetuate the

¹ Martz & Myers, Opus cit., p. 103.

² See : Blank, Opus cit., p. 81, 83, 172

³ Ibid, p. 102

⁴ Ibid, p. 55-59

patriarchal system of hierarchy known in South America as "Machismo". Firstly, the value of *personalism*:

The notion that abstract rules can be impartially applied by an impersonal institution is generally disregarded with disbelief. Effective decision making in almost every organization is concentrated in its chief, whether he be a government minister, corporate executive or political party president.¹

Secondly, *particularism* between individuals - friends, god-fathers, family clan - for mutual protection and trust; nevertheless, it is common in Venezuela that members of the same family and close friends be active fervent militants or defenders of rival political parties: to politically participate and to discuss politics is very important for Venezuelan people and "political gossiping" is part of the everyday life. Thirdly, the value of *power ambivalence* of obeying - but not fulfilling -, in relationship to authority; and, fourthly, *partisanship*: loyal party affiliation means support, patronage, advocacy and promotion, specially if the party holds the government; but those who are not affiliated are considered "outsiders" and do not get any support. The above Venezuelan "Political Culture" strongly influenced the educational process of ecological adult learning 1979-1982.²

The first case-study of ecological adult learning

¹ Ibid, p.55

² See Venezuelan politics in: Martz, J.D, 1966; Martz and Myers, 1977; Penniman, H.R. Edit., 1980; Burnett and Johnson, 1968, Chapter 8: Venezuela; Blank, D.E., 1973; Pike, F.B., 1973.

takes place in the above Venezuelan context, evolving through three distinctive stages:

II. CASE STUDY 1: ECOLOGICAL ADULT LEARNING IN VENEZUELA

 TABLE 1: Summary of Stages of Case Study 1

Stage 1. "Background"

(August 1977-April 1979).

Extension Course: "12 Methods of Non-Polluting Agriculture" Rural Community Project: "There is a Treasure in Garbage" Simon Rodriguez National Experimental University: U.N.E.S.R. (Canoabo, Carabobo State)

Stage 2. "Educational Programme on a National Scale"

(May 1977-November 1982)

"Toward an Ecological Society" (Office of the Governor of the Federal District and the U.N.E.S.R., with the support of 45 public and private institutions (Caracas, Federal District)

Stage 3. "Consolidation and Permanence"

(Dec.1982-1990)

The Programme "Toward an Ecological Society" continues to grow despite major economic, political and administrative changes; it also continues as a community movement, linked with other similar Latin American and international movements.

Following, is a description of the three stages:

1) Stage 1 (August 1977-April 1979)

From August 1977 until April 1979 three distinctive processes of ecological adult learning were accomplished: from August 1977, "Media as Educational Agents" which started in Caracas. From February to October 1988, the community project "Garbage is a Treasure" and the extension course on "12 Methods of Non Polluting Agriculture". These were held at Campus 7 of the "Simon Rodriguez University" in Canoabo, Carabobo State. The background of some "Methods of Adult Learning"¹ that I have applied in Venezuela - and in New Zealand - was grounded on two major experiences in my own adult learning process.

a) "Background" Firstly, experiences in "creativity development" which - from 1956 until 1973 - were integral part of my training as a professional dancer under the guidance of several teachers of classical ballet, jazz, folkloric and contemporary dance in Venezuela, New York and Paris. When I was studying at the university, I started the educational research on the freedom of creative expression of children and adults which was the core of my work as a dancer, teacher and choreographer. "Creativity development" also became a very important goal for my educational work and action in ecological adult learning. Secondly, my learning process

¹ See Chapter Five

within the "First Group of 32 Lecturers" of the Simon Rodríguez National Experimental University which started on the 13-3-1973 under the government of the Social-Christian party COPEY. An Executive Organizational Committee was appointed by the National Council of Universities and they, in turn, selected a special task group of seven specialist in Tertiary Education. Their purpose was to set up a course for the new teaching staff on "Creativity and Innovation of Methods and Organizational Models of Adult Learning" applied to the foundation of the new university. The task group selected the first group of 32 lecturers from 500 applicants in a very difficult academic contest that took many days of tests, examinations and interviews. They were looking for individuals with inter-disciplinary backgrounds, rich life experiences and high levels of creativity and intelligence; the flexibility to quickly adapt to new situations, high self-esteem and assertiveness; teaching experiences within and specially - outside - the formal system of education; previous experiences in team work; communication skills, leadership and creativity; and positive attitudes towards innovation and change.

After the selection, those in the selecting committee became integrated with the 32 selected conforming a group of 39: "the group". The "non-hierarchical" administration of the university had to demonstrate in practice, principles of "equality" and "horizontality" in an environment of "laissez faire". The

general "hypothesis" to be demonstrated by the group was that in an inestructured and horizontal system of decentralized teams, - taking decisions by consensus - all individuals, being "equals", would actively participate to solve problems and to take decisions consensually. The philosophical conception of the university was based on a combination of Humanistic and Radical theories of adult education: "Andragogy" of Malcom Knowles; "Learning" and "Facilitating" theories; "Encounter Groups" of Carl Rogers; "Liberatory Education" of Paulo Freire and "De-schooling" theory of Yvan Illich. Then, "the experiment" on adult learning started to take place within the group of lecturers.

On the academic level, there were several conflicting guidelines that were brought into discussion by people of different backgrounds. Some were in favour of traditional academic modalities and conventional teaching methods, and others were in favour of "learning to learn" trends and the "not teaching but facilitating" methods of adult education. One third of the participants were in favour of the radical-humanistic traditions of adult education such as "de-schooling", participatory research, encounter groups and inter-disciplinary learning. However these differences, it was generally assumed that each individual was responsible of her/his own self-learning process and each would be an active participant in a non-hierarchical system of horizontal teams taking decisions by consensus. Learning "by doing"

involved concrete work in the areas of administration and education. Activities of critical analysis of the theory applied (or not) in the practice, were a permanent process of individual self-learning combined with a collective-participatory process within and outside university.

For nine months the consensual model of the "Simon Rodríguez University" was based on a "new" body of values, assumptions and beliefs that circulated between all the participants. In 1973, we were all acting as partners, starting a new enterprise and learning from each other. That year, there were no students enrolled, although a few people engaged as clerical staff became participants with the other 39 "equals". The general assumption was that all the participants in "the experiment" had similar status, socio-economic background, educational levels and leadership characteristics. In such "ideal" group it was soon possible to develop strong links of friendship and mutual respect, effective communication, exchange and mutual support and to share responsibilities within small teams. Although all the members had different levels of motivation, openness and problems-solving attitude, two "conditions" were basic for the success of the "experiment": honesty and mutual trust. These were the core of general consensus and face to face self-evaluation.

In 1974, the first students were enrolled in the two careers offered that year: "Education" and "Administration". Still with a small population, the university could function as an anti-authoritarian, horizontal and non-hierarchical organization where decisions were made in inter-disciplinary and face-to-face democratic teams of 5 to 7 people. These small teams were linked through a network system of teams of "coordinators" and "communications". These teams, collectively, formed "the group". Permanent rotation of responsibilities permitted that each individual within the "clerical staff, students and lecturers" could (and should?) assume positions of leadership on a rotational basis, could administrate within the limits of the budget and could have access to high levels of decisions dealing with academic authorities "outside" the university. There were no "workers" separated from "academic-intellectuals" (students and lecturers) because it was decided by consensus that all the physical work required, including maintenance and cleaning tasks would be equally shared between all the participants. As explained before, the clerical-administrative staff were also integrated in teams with "facilitators" and "students".

The emphasis at the university was on "learning" and not on "teaching". Some of our roles as "lecturers" was to be "facilitators" of the learning process, of communication, of flow of information, of participatory research and of inter-disciplinary approaches within the

teams. During the process, we developed a particular language which included new concepts in adult education. While other teams were deciding their own ways of facing authentic adult learning and developing their own methods and strategies, the team in which I participated decided to try an adult learning process organized in three levels of activities¹. There were: "*Living Knowledge*", "*Theoretical Formations*" and "*Critical Analysis*".

The first level of learning was "Living Knowledge" of the physical, socio-economic and cultural reality of the local community. It included the "explorations" and the methodical research of poor slums which co-existed side by side with luxurious neighbourhoods in Caracas. The first "explorations" were done individually, -at levels of sensorial perception-, with the object to perceive the reality in absolute detail. These "explorations" were followed by a systematic identification of the problems and needs of the community, collecting data on all the aspects of the life of the People. In the team meetings, the participants compared and integrated their observations and, after many visits to the same place, it was possible to establish a "diagnosis" of the needs of learning of the community. Our educational work and action had to happen *within the community*; hence, - after our activities of "diagnosis" of the physical, socio-economic, political

¹ Later, I expanded the "Methodology of Adult Learning" to a range of seven activities. See Chapter Four

and cultural reality - we were able to conceive plans for action which were followed by our active involvement with families, community leaders and neighbourhood organizations. Our learning process culminated with activities of "critical analysis" of the reality, and with our active involvement within the community, in order to develop collective actions for social change.

The most important "classrooms" of the university were outside, in the streets and in the poor slums of Caracas. Critical Analysis of the reality, was followed by activities of "evaluation". This was as a permanent three-folded process which involved "self-evaluation" of each individual, "team evaluation" and "project evaluation"; the evaluating process in the team was a permanent face to face discussion, in order to monitor the specific projects in the community and the administration system of the university to which the teams were committed. It was also very important that the individuals within the teams learn to detect, to diagnose and to solve problems and conflicts together. According to a set of values that included a strong "anti-gossiping" attitude, nobody would express opinions or comments about other person or persons without them being present. Another important attitude was not to involve the whole group within the problems or inter-personal conflicts between two or three people: they would have to solve the problem between themselves without affecting their team, other teams or the whole group.

The consensual process worked as follows: if an individual or a group presented a proposal to others, it followed a process of discussion and argumentation that could be short, interesting and stimulating or long, tedious and boring. The system of "trial and error" was very useful because sometimes everybody agreed to try a particular way of solving a problem and if it would not work then the team would try something else. Some decisions were taken "as consensual" at a level of small teams even if some individuals were not discussing but just observing others to discuss or even if somebody was absent, because it was generally assumed that -in both cases-, you were trusting the collective common-sense of your team and that you also trusted that the participants in the team would do their best to find the best solution to the problem for the benefit of all the people involved. The interaction of trust between the different small teams were more complicated and -if it was considered that a decision could possibly affect in a negative way the whole group-, the decision would not be taken until everybody discussed and eventually agreed with it (or not). At that point, the sessions with the whole group would be very tedious and participation would be reduced to less and less people arguing for hours, to the point that some would agree to something just because they were tired or bored.

The consensual model was excellent while we were

39, good when we were 60 and still functional when we were 100; but -when the population grew more than 100-, it became complicated and, when we reached the point of more than 200 people, internal communication, rotational leadership and flow of information became impossible and the collective consensus overrode the individual. At a population of 200, the consensual "experiment" started to have a negative effect in all the people involved since sometimes the process could become oppressive, almost dictatorial. When we reached that number, some individuals became manipulative trying to keep their positions of leadership and also some teams became more dominant than others. Finally, after many internal conflicts, "the group" of 200 people started to "disintegrate". At the same time, after the general elections, the government changed and a new administration took control over the university as the "Rectorial Council" of only males. Most of its newly appointed members were leaders and activists of the "Democratic Action" party and with their patriarchal mandate, the consensual model ended. Some in the group of 39 "lecturers-pioneers" that started the university under the umbrella of the social-Christian party "Copey" were considered too "radical" by the academic authorities while some were considered "moderate" or "conservative". Hence, the authorities started a new policy of dispersing the staff into new positions through a policy of expansive decentralization and multiplication of Campuses designated as "Nucleus", all around the country.

In 1975 the university -under the new hierarchical patriarchal administration-, offered not only the careers of "Education" and "Administration" as in 1974 but also many other unusual and highly specialized careers. The different "campus" or "nucleus" adopted different educational modalities to choose from, such as: "conventional-academic", "distance-learning", "radical-participative" and "student-centered". Some of my colleagues went to work with the conventional academic authorities while others, following guidelines on "participatory research", "radical adult education", practitioners of "de-schooling the society" of Ivan Illich and "cultural action for freedom" of Paulo Freire, continued working at Campus "Nucleus 1", named "Center For Experimentation of Permanent Learning" C.E.P.A.P. Very soon eight new campus or "nucleus" of the Simon Rodriguez University flourished in rural and urban areas, some of them very distant from Caracas.

Between 1973 and 1976 and while I was working at the university, I had accomplished a three years individual process of self-learning "organic"¹ methods of growing food, through dozens of "how-to" books and magazines received from the U.S.A. I had to translate

¹ That means, 17 methods that **emphasize** on the use of "organic" matter to feed the soil through compost, mulches, green manures and liquid manures. The "organic" methods also use "inorganic" matter such as: pulverized minerals such as rock phosphate, dolomite, basalt rock, clay, sea salt, green sand and granite dust.

them word by word into Spanish and strange, new english words such as "manure", "compost", "farmer", "edible" and "pea" were carefully copied in a note book with the pompous name: "Personal Spanish-English Dictionary of Organic Gardening and Farming". I also had to put all that "organic" knowledge into practice in the gardens of the "Simon Rodriguez University" with a group of students-participants in Nucleus 1 in Caricuaao: designing and planting the gardens, making compost piles, revegetating the eroded slopes of the mountain behind, and trying to convince "senor Manuel" (Mr. Manuel), the portuguese gardener of the university, not to spray lethal "Malathion" or "Dieldrin" poisons in campus.

I wrote a methodical plan of learning "organic agriculture" in the U.S.A. which included a range of six different types of activities : "living knowledge, theoretical development, practical skills, team work, critical analysis and self-evaluation". In August 1976 I went to the U.S.A. on a special permission to leave with full paid salary granted by the Rectorial Council of the Simon Rodriguez University, to study Organic Methods and Social Ecology. Between 1976 and 1977 -in my learning quest for Nature- I went from the organic farm of Mr. Lee MacComb in Leesburg, Florida to Denver Free University in Denver, Colorado; from "Koinonia" community in Baltimore, Maryland to the Institute of Social Ecology and Goddard College in Plainfield, Vermont; and from the New Alchemy Institute in Cape Code, Massachusetts to the Organic

Gardening and Farming Research Institute in Emmaus, Pennsylvania. While I was experiencing the "Living Knowledge" of reality, I found seven wise men and a woman -four of them between seventy six and eighty two years old- who had dedicated their lives to growing healthy food with non-polluting methods, responsibly: trying to understand Nature and to imitate Nature. Their hands - with no exception- were big and earthy, the palms showing callouses through years of working with the land.

My first teacher -Mr. Lee McComb- was 76 years old, with 40 years committed as a commercial organic grower, pioneer and activist in Leesburg, Florida. We travelled long distances in his truck trying to find organic matter in order to make compost¹; we collected manures, rotten straw, peat and coffee grounds while he opened my eyes to the wonders of organic matter and introduced me to the secrets of the ecological "Law of Return" through dialogue. He said that -once it has accomplished its cycle of life-, all organic matter must return to the living soil from which it originated. This devolution of life to the soil -the necessary condition for a **true** fertility-, was expressed as: "The more alive the soil, the more fertile it is". He taught me techniques on how "to feed" the soil and not the plant, because the plants

¹ "Compost" is human-made humus or highly decomposed and a-morphous organic matter. In my courses, people learn 17 different methods of composting, mulching, green and liquid manures and preparations for returning organic matter back into the living soil that originated it.

grown in a soil rich in life are able "to take care of themselves".

At this point I have to clarify that the "Law of Return" of Mr. Lee MacComb must be differentiated from the "Natural Laws" or "Laws of Nature" from which Murray Bookchin says:

'Nature', we are arrogantly told by privileged Euro-Americans who parade as "natural law" theorists, "must be permitted to take its Course"- as though the profits of corporations, banks and agribussines have anything to do with the "course" of nature."¹

On the contrary, my teacher was very conscious of the oppressive and anti-ecological nature of "corporations, banks and agribussines"; specially the poisoning role of petrochemical corporations in the U.S.A. One day, walking along his never pruned orange trees that extended for kilometres beyond sight, he asked me to see under the branches where hundreds of spider-webs were swinging. He told me, pointing to the minute spiders, that they were "taking care" of the oranges, hunting for insects. The soil was very rich in humus and covered with a thick mantle of weeds, grasses and clovers; he said that he did not kill or even disturb the weeds under the trees because if he did, the insects would not have anything to eat and they in turn, would eat his oranges. In another occasion we were travelling in his truck along hectares of fields planted with thousands of "organic" oranges until we arrived to a wide

¹ Bookchin, M., Remaking Society, p. 11

and dusty road; he asked me to look to the other side - at his neighbour's oranges - and to describe what I was seeing. And what I saw was "Death": no weeds, no spiders, no living soil. Just "clean", chemically sprayed, poisoned crops.

This is how I learnt for the first time (through simple and practical "Living Knowledge"¹ of the reality and guided by the ecological wisdom of my teacher, Mr. Lee MacComb) the ecological "Law of Interdependence of Cycles of Life". In Nature, he told me, the cycles of birth, growth, maturity, reproduction, declination, death and decomposition of individual organisms are all inter-dependent and inter-connected with the cycles of life of all the other organisms (some invisible to the human eye) this happen through continuous exchanges of matter, energy and information. However, he wanted me to remember that each individual is unique, special and important in the whole Life. In our many conversations he encouraged me "to return" and to start to teach "...the poor people of Venezuela, who need this knowledge the most."

My second teacher -Mr. James H. Fowler- who was 83 years old, was a pioneer of the organic method and organizer of the first "health food" cooperative in the state of Colorado and Chairman of the Organic Marketeers

¹ For its description see Chapter Four.

of Colorado. While I was attending his course on "Organic Gardening and Farming" at Denver Free University I learnt about the political implications of the "social system of energy waste". In his highly political lectures, he uncovered the hidden side of the capitalist industrial society and its dispersion of energy in producing not only "junk" products for the consumers, but industrial waste; he detailed with critical analysis and concrete evidence, the dark side of the economic mechanisms of the capitalist system, the control of food systems by petrochemical corporations, and recommended us -a group of ten students-, not to buy hybrid seeds. Mr. Fowler explained the involvement of agri-business with the "business of life" and the implications of genetic bio-engineering: how multinational corporations were manipulating genetic material of plants, animals and people; he presented scientific data, for example, of cows dying of heart failure caused by malnutrition by being fed with hybrid corn.

He invited us to claim for the municipal "activated"¹ sludge of the city of Denver and encouraged us to go to workshops of Francis Moore Lappe on "Food for all with Dignity"² and to attend conferences with E.F. Schumacher talking on: "Small is Beautiful"³. I used to

¹ Means "aerated" or "oxygenated".

² See Bibliography.

³ See Bibliography.

travel long distances to the town of Loveland and to the Rocky Mountains area to visit communities with their solar-heated houses, wind generators and methane gas stoves and people living in geodesic domes and pyramids. These self-reliant communities of 40 to 200 people were networking with other communities exchanging goods and services, developing small scale business and running their own banking systems. I visited communities that collectively grew and processed all their food, recycled all their water and waste, produced all their energy and built their own energy-efficient houses. In a community I saw a three years supply of food, water and energy stored four meters underground, enough for two hundred people to survive independently of the "outside world". All these communities had taken the responsibility of their elders and were educating their children far from the system of public schools, T.V., and other media.

The most important understanding of the relationship "energy and society" within the "organic" group of ten students of Mr. Fowler was to concentrate our own human energy working and learning in small teams. It gave us strength as we collected hundreds of bags in the backyard streets of the city of Denver containing dry leaves for composting. We started a community garden from scratch: with our organized human energy and combined creativity we made life grow and multiply from barren soil into a beautiful community garden in Cherry Creek.

My third teacher was a wise 78 years old man, Mr. Dick Falkenstein whom -for 25 years, since 1925-, had been a teacher of Biology at the University Ling Nan in Canton, China and had an extensive background on the principles of the Bio-Dynamic Method. The Bio(Life)-Dynamic(Forces) or "B.D."¹ Method started in 1924 after a series of ten lectures of Dr. Rudolf Steiner (1861-1925)², to a group of european farmers and scientists who were concerned about the declination and pollution caused by the system of "chemical" agriculture that had already started to expand in Europe, through the "Industrial Revolution". Since 1926, Dr. Ehrenfried Pfeiffer, a biologist and biochemist following the guidelines of Dr. Steiner, developed scientific research on B.D.; firstly in Europe and Egypt and since 1940 in Chester, New York, in his Laboratory of Biochemical Research. He developed the laboratory methods of "chromatography on paper" and "sensitive cristalization". He also developed a very important scientific research on eight "Biodynamic Preparations", "companion planting" and the ecological value of weeds. Besides Dr. Pfeiffer, many other scientists have made their own contributions to the B.D. method, but some of its practices -such as the "preparations" or "planting by the moon phases" are still considered bizarre, speculative and a highly polemic issue for the "pragmatic-organic" and for the sceptical

¹ The name "Bio Dynamic was an invention of the people that attended the ten lectures of Dr. Steiner.

² Dr. Steiner died one year after those lectures.

partisans of "scientific chemicalism". While on the one hand, some practitioners of the "Bio-Dynamic Method of Gardening and Farming" have made a quasi-religion of the "Antroposophical" philosophy and of Dr. Steiner, on the other hand, B.D. has become today a very important commercial system of non-polluting food production all over the world and is very popular in Europe.¹

Thanks to my B.D. teacher, Mr. Dick Falkestein, I learnt to perceive the almost invisible world of very small things and the cycles of metamorphosis which modified the environment through the seasons and the rhythms of Nature: the micro-cosmos and the macro-cosmos, although he did not profess any mysticism or make a religion of the "environment". His approach to the Bio-Dynamic, French Intensive and Organic methods was objective, submitting these methods to "experimental and control" comparative fields. He was practical and his wisdom could be seen in the gardens of "Koinonia" community. I used to spend eight to twelve hours a day working in the orchard and in the gardens, following his teachings and we, a group of eight "students"-, had to walk long distances to the forest and using thick gloves, we collected large amounts of stinging nettles (*Urtica*

¹ The international symbol that guarantees the biological quality of the B.D. food is the "Demeter" symbol, taking five to seven years for a farmer to reach the standards required. The international symbol for the organically grown produce is the "Biogro". Both symbols are recognized by the International Federation of the Organic Agriculture Movements (IFOAM).

dioica) (one of the richest sources of silica in Nature)¹, for our "dynamic brews" that we made submerging the nettle in warm water and letting it to ferment in wooden barrels beside the compost pile and used it as an "activator" of the humification processes. My hands developed thick callouses lifting the shovel to load the truck with cow manure from the stables nearby. We used to visit the Bio-Dynamic orchard of his eighty years old friend Eugenia, the first woman to start a business of wholemeal flour production in the Eastern States of U.S.A. In the afternoons I used to visit the orchard or the forest of "Koinonia" where plants and soil were perfectly integrated and to listen to the sounds of Nature.

"Soil-plant", Dick said, is a unity that must never be separated because for the humification -or total decomposition of organic matter-, they must work together as an highly organized organism which in itself contains millions of other organisms perfectly organized in layers, and each layer being like an organ specializing in a specific function. Dick compared the layered organization of the soil-plant with our own digestive system, similar to our mouth, stomach and intestines; he compared, for example, the rich and thick soil litter on

¹ It also contains Calcium, Copper, Iron, Nitrogen, Potassium and is a humus-forming weed.

the forest ground in "Koinonia" with our mouth¹ when we chew our food. Observing the different colours, textures and smells of slices of soil rich in humus, he compared the highly organized humification process -or gradual decomposition of organic matter happening in defined layers, with the digestive gradual process that happens in our bodies.

In "Koinonia" Community, and with our elders, Dick and Marion and the "Law of soil-plant Unity", there were forests, pot-pourris of herbs and flowers and medicinal weeds; ladybugs, mantises, bees and aphids; wind, rain, stars and the celebration of Life. In "Kiononia" community we -people-, were one in tune with the ecological "Law of Diversity": soil, plants and animals, and People sending letters and messages from all over the world. Also in "Koinonia", I had another teacher, Mr. Robby Halpern, who had been a student of Allan Chadwick² at the University of Santa Cruz in California; he carefully explained the "Bio-dynamic French Intensive Method" that enable us to grow more food in less space;

¹ Later, I found that this practical-empirical conception of Dick Falkestein was the object of research on the "Biological Conception of Soil", scientifically studied by Hans Muller and Dr. Hans Peter Rusch in Switzerland-Germany from 1949. See Bibliography: Rusch, La Fecondite Du Sol, 1972.

² In the early sixties, Allan Chadwick - a lecturer at the University of Santa Cruz in California-, started the system of permanent beds (for the plants) and permanent paths (for the people), with a group of students. He became the pioneer of the "Bio-Dynamic French Intensive Method" of growing food, known as B.F.I. which origin is Chinese.

it is a system which originated thousands of years ago of permanent beds and permanent paths: "...the soil is for the plants and the paths are for the people..." That summer, I went to study "Biological Agriculture" at Goddard College in Plainfield, Vermont, a course organized by the "Institute of Social Ecology" where Mr. Charles Woodard was teaching the theory of Social Ecology which integrates:

"...the study of human and natural ecosystems through understanding the inter-relationship of culture and nature. It advances a critical, holistic world view and suggest that creative human enterprise can construct an alternative future. This interdisciplinary approach draws on studies in the natural sciences, feminism, and philosophy, particularly critical theory, to provide a coherent critique of current anti-ecological trends."¹

My learning process also included skills and practical implementation of human-scale and integrated eco-technologies, small-self-reliant systems of food, energy and shelter. In Massachusetts, at the "New Alchemy Institute", I attended workshops on ecological self-reliance and visited the "Noha's Ark" -an integrated system of fish-vegetable-solar heated-wind-electricity green-house-; also attended lectures on "ecological life in the future" at the "Towards Tomorrow's Fair", a display of eco-wisdom and eco-technologies at the University of Amherst. I also visited the Rodale "Organic Gardening and Farming Research Institute", an "Information and Education Center" and the Rodale Press in Emmaus, Pennsylvania. These learning activities of "living

¹ Institute for Social Ecology, Brochure: Summer Programme 1984, p.2

knowledge" in the U.S.A. opened new and multiple sources of information on sustainable and integrated, small-scale eco-technologies that I wanted to practice in Venezuela.

Progressively, I started to perceive five ecological principles that were very simple but at the same time, so important, that they totally changed my life. These principles were always evident to my senses as a harmonious and beautiful expression of Life and perfection in all the wild places I went. They were always the same principles beyond the concrete geographical, climatic and ecological differences. These principles of Life would be the same in the bush in Plainfield, Vermont, U.S.A, or in Guasdalito, Venezuela; they were always happening beyond the "north-south" contradictions and beyond seasonal variations. Also I started to realize within myself that beyond methods, techniques and practical skills, what my old teachers were trying to do was to imitate those five ecological manifestations of Nature in their farms and orchards. Slowly, I began to conceive as a unity, those five ecological principles of: "Interdependence of Cycles of Life", "Return", "Soil-Plant Unity", "Diversity" and "Energy Renewal". These harmonious principles were only evident in Nature and evident to myself -although only if I was totally "in tune" with Nature -not intellectually- but with my all self.

I never could apply these harmonious principles to

the interpretation or the understanding of the hierarchical, inhuman and exploitative social reality. From the balanced ecological perspective, each one of my teachers included one -or two of those principles- in their lectures or practical demonstrations; however, on no occasion was I taught these five principles as a philosophical unity. A principle was scientifically explained or expressed by them as a statement or demonstrated in the concrete world with practical examples and hard work but they were not intellectually expressed -in any case- as an integrated conceptual unity. I understood that -once in Venezuela-, I had to be well tuned to the local native environment and to the local, popular, traditional culture of pre-industrial times of our peasants. This understanding would be absolutely necessary if I wanted to be one with Nature in Venezuela, and to work as an adult and community educator. Nevertheless, it was not until years later that I conceived the five principles as a unity that would guide my everyday life towards ethical actions of revitalizing "dead" environments.

Whereas these ecological principles of harmony and balance became important guidelines¹ for my work with Nature, I had to search "somewhere else" for an explanation of society and guidelines for my work with People. The harmonious balance of Nature could not be

¹ See Chapter 4.

applied to the understanding of the socio-economic, cultural and political context of the oppressive society. I wanted to find an interpretation of society beyond the liberal-capitalist or Marxist-socialist ideological biases and constraints. Besides, I do not take part in the fanatic, mystic or fundamentalist religions centered around "environmentalism", "green movements" or "naturalism"; nor I believe on "gods" or "goddesses" of Nature that some people is using to interpret the reality.

On the contrary: when I came back to Venezuela from the U.S.A. I also started to have many doubts, even about the "organic" and "bio-dynamic" approaches. For example, Nature in South America did not have cows or horses: they were part of the expansionist plans of the european empires which result was the invasion of South America by the Spanish and the Portuguese conquerors. What would be the impact on the Venezuelan natural environment of the "Organic" and "Bio-Dynamic" methods? What did these methods have to do with the Venezuelan context since they are based on manures and preparations made of plants and animals that were brought to South America from Europe? These methods were re-created and re-copied from ancient cultures by white, academic males of the advanced industrial world. Would the commercialization of the Organic and Bio-Dynamic methods contribute some way to the perpetuation of the patriarchal farming system of cattle-farms for milk and meat? Why and through which

political and economic mechanisms did the governments of South America officially adopted the "technological packages" of the industrialized system of food production ruled by Transnational Corporations? What local knowledge have been made "invisible" by the authorities, such as the ancient agricultural wisdom of our native South American ancestors?

The self-learning process I started in 1973, of "Living Knowledge", became a permanent and never interrupted quest for freedom and truth in my life. What I was learning with my teachers in the United States was not academic "theory" of "Ecology" but the "eco-living" and practical "eco-knowledge" of the reality, hard physical "eco-work" and re-education of my "eco-senses". Ecology was an authentic knowledge that could not be found in fossilized books: it was Life. What my teachers told me was certainly not "conceptual frameworks" for intellectual discussions but on the contrary: for sixteen years the "Real Ecology" of my teachers, their dynamic and practical "ecological way" of learning became an integral part of my life. Sharing and learning, discussing with thousands of people, classifying rubbish, smelling anaerobic decompositions, using my hands for making clay-models of Nader Khalili's ceramic dome-houses¹ or for spreading pig manure as a pond sealant.

¹ The "Ceramic Houses" of the Iranian architect, Nader Khalili, are ideal models of ecological shelter. See: Khalili, Ceramic Houses. How to Build Your Own, 1986.

Sweating, working day and night and burning my skin with stinging nettle.

Hence, I do not share the almost religious reverence that some people feel for Jim Lovelock and his "Gaia Hypothesis"¹. He claims that **he** understands **she**, planet Earth, but ignores everything about the stinging nettle²:

...this book is about the whole life on Earth within the older and more general framework of geology. Still, the nettle, a most unecological vegetable,³ bristling with poison barbs, must now be grasped.³

I will argue that a person who defines the "nettle" as an "unecological vegetable", ignores its ecological value, overlooking *why* it must be "grasped", not knowing what to do with the nettle and not loving the nettle, is not qualified to talk about "...the whole life on Earth". A similar attitude of talking about ecology but not doing it, is practised by some professionals and by experts graduated in "scientific Ecology", professionals on "Conservation of Natural Resources" or Managers of "Resource Management" who keep on mixing their own plastic rubbish with banana skins, while influencing on "environmental" policy making. Their "environmental" and "green" reformism is what I call "Unreal Ecology".

¹ For an analysis of the sexist connotations of "Gaia", See: Murphy, Sex-typing the Planet: Gaia Imagery and the problem of Subverting Patriarchy, p. 155

² *Urtica dioica*

³ Lovelock, Gaia. A New Look at Life on Earth, p. 124

b) Preparation After one year of learning in the U.S.A., I moved back to work in Venezuela. The academic authorities kept me for three months working at the university in Caracas convinced -in spite of my reports-, that I had been trained in conventional urban landscape design. An important event was going to change that situation, though: immediately after coming back from the U.S.A., I started to be interviewed by different journalists about ecology, global food systems, self-reliance, food reserves, chemical agriculture and the organic philosophy which involves growing food without poisons and synthetic paraphernalia. Some journalists who became "educational agents" since they contributed to disseminate information on ecological issues through the media in an "educational" way: explaining, demonstrating and giving examples. As a consequence, hundreds of people reacted to the many articles and interviews - published in the main newspapers and magazines-, sending letters to the editors an expressing their urgent needs of learning. Those interviews created a "chain-reaction" on a national scale: hundreds of letters poured in and phone calls and visits of people wanting to learn never stopped. I started to share learning processes with others outside university mainly face to face and since then, I understood that the "Media as an Educational Agent" was going to be a very important strategy for any future educational action-work outside the formal system of education. A large number of people with diverse

educational backgrounds -many of whom did not have the formal educational qualifications required to be registered as university students-, were asking me for courses which I knew would not be approved -in any way-, within the formal academic system of the university. But those people were not interested in academic accreditation at all, nor in degrees or titles but in ecological knowledge.

According to the Venezuelan "political culture" of "personalism"¹ and in order to avoid the patriarchal hierarchy of males occupying sub-positions or, what it was defined at the university as: "to follow the regular procedures through the correct administrative channels", I took a sample of "compost" to the "Rector" of the University; explained him how I had made that rich soil with kitchen rubbish, showed him the hundreds of letters I had received from people all around the country and then, proposed the possibility of starting a course on ecological methods of gardening and farming at the university. He was an enthusiastic gardener, specialist in adult literacy and author of many books on Andragogy.²⁵⁸ He recommended me to start my educational

¹ See above: I. (3) Political-Regional Context, the analysis on Venezuelan "political culture"

²⁵⁸ Is the theory of Adult Learning of Malcom S. Knowles, based on four assumptions:

"1.) his self concept moves from one of being a dependent personality toward one of being a self-directing human being; 2.) he accumulates a growing reservoir of experience that becomes an increasing resource for

work at the university campus named "Nucleus 7", located in the small town of Canoabo of Carabobo State, a very isolated rural area 4 hours from Caracas. He suggested to establish there an educational project for the community. This I did, because I understood that to work in the area of "Rural Education" at the university in a small community located in an isolated rural environment would be ideal for putting ecological theory into social practice. Besides, with the authority of the Rector, I was not required to teach credit courses and decided to work -as much as possible-at the edge of the formal sub-patriarchal hierarchy of the academic staff of "Campus 7-Canoabo", mainly composed of male, narrow chemically-minded agronomists.¹ They were teaching students of "Rural Education" how to grow monocrops with chemical poisons and "NPK Mind" which assumes that:

...agriculture was a branch of chemistry (1840-1900). The use of fertilizers was firmly established in the work and the conception of research stations. The major importance of Nitrogen (N), of Phosphorus (P) and of Potassium (K), was established. In other words, the

learning; 3.) his readiness to learn becomes orientated increasingly to the developmental tasks of his social role; 4.) His time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his orientation toward learning shifts from one of subject-centredness to one of problem centredness."

Knowles, 3. Andragogy: An Emerging Technology for Adult Learning In: The Modern Practice of Adult Education, p.39

¹ In Venezuela, they are named "Agronomist Engineers" to designate an academic rank or status with university degree, which differentiate them from the "Peritos Agropecuarios" or technicians who are not graduated at the university.

NPK mentality was imposed¹.

The agronomists spent all day with the students in classrooms and laboratories with air conditioning, thick carpets, sophisticated teaching equipment, academic accreditation and expensive budgets. After graduation, those teachers in "Rural Education" would, in turn, train peasants in polluting and poisonous agriculture. The agronomists were also teaching students of "Food Technology" how to process raw material harvested in the chemical fields, into artificial food stuff on an industrial scale. They also established a new business career in mass production of animals and plants for students of "Rural Administration". The students mainly came from Valencia, Bejuma and other towns and cities in the region.

It must be said that all public universities in Venezuela are highly political and campus "Nucleus 7" was no exception. Most of the new staff -academic, clerical, workers- of the university, were recruited members of the popular "Democratic Action" party. It was evident that they met regularly with the local authorities of the party in town and that the whole educational strategy in Canoabo was being targeted towards the new national electoral campaign. The agronomists were also teaching the same contents of learning described above -"off

¹ Translated into English, from French: Howard, Sir A., Testament Agricole. Pour Une Agriculture Naturelle, p. 173

Campus"-, to illiterate peasants of Canoabo: involving and organizing them to produce on a commercial scale under the illusory goal of competing -at lower prices-, with the big monopolies in eggs production and the so called industrial "maffia" of meat. This political influence of the Democratic Action party in the university and in the community -centered on superficial social reforms-was going to determine future events of my educational work.

I arrived in August 1978 and there, in a green isolated valley surrounded with high mountains, started my own learning process, trying to be part of and to understand the local Nature and People. I became a "neighbour" of families of peasants some of whom had never been in any city before. I explored every corner until I discovered a feeling of belonging to the community and found the clues on how to start a popular learning process centered in solving one of the most critical problems and causes of general concern: rubbish. But the process of conscious self-learning had to start within myself going to live from a cosmopolitan mega-city of three million into an isolated rural community of 30.000 people. With only few exceptions they were all peasants and lived dispersed in high mountains and deep valleys. The majority of my neighbours were considered "illiterate" by the Department of Statistics, but -in the reality- all of them had preserved a rich tradition of oral history; they were very wise people and knew

everything about the local environment and soon, some of them became my teachers.

I was the only member of the academic staff that decided to live in the town of Canoabo like my neighbours did. The houses in Canoabo were four hundred years old made of mud with roofs of hand-made clay tiles and bitter canes. Most of the people in the area -myself included- did not have a car, radio, telephone, newspaper, T.V. and -frequently-, no electricity. Black waters ran along the street, passing through my front door because the houses in the hills behind my house did not have a sewage system. I grew most of our¹ food in the weedy backyard and my clock was the accurate cycle of animal sounds, movements and activities at different hours. I used to go at 7 am to the university -with my two years old daughter, still breast-feeding-², walking or riding a donkey while the other lecturers had to travel at high speed in their expensive air-conditioned cars: for two hours from the city of Valencia in the morning and for two more hours in the afternoon.

That my daughter came to campus, became later a political issue. One of my earlier educational efforts was to propose child-care facilities and a pre-school for Canoabo, specially for working mothers. Many woman in

¹ "Our" means my baby daughter Valentina and I

Canoabo work in subsistence agriculture. I also started to work in the fields exploring the many rubbish dumps of Canoabo; not with the scientific motive of archaeologists, sociologists or anthropologists¹ but searching for organic matter in order to make compost. I was looking for things like animal manures, vegetable scraps, pruning, bones, hair or rotten food. While studying the rubbish heaps -some 5 metres depth of anaerobic sludge² I started to feel frustrated because I realised that it would be very difficult -or maybe impossible- to separate the "living-organic" part of the rubbish dumps from the entangled and compacted mixture of "dead-inorganic" matter such as plastics, metals, rubber and glasses. I understood that the separation and classification of materials had to start from the moment that somebody decided that "something" already used becomes useless "waste" and wants to get rid of it. The conscious step of stopping, thinking and being conscious about the relocation and reutilization of the object on a new dimension of time and space, would involve a very special re-educational process of changing habits,

¹ That now is defined as the science of "garbology".

² Specialized bacteria that live with little or no oxygen are able to decompose organic matter in "anaerobic" (meaning "no air") conditions, generating bad smelling gases such as methane, indol, skatol, merkaptan and ammonia. I could hear the chewing sound of thousands of maggots eating the sludge under my boots and with a stick I used to poke holes in the crusty surface, revealing moving masses underneath. I thought they were fly-maggot but soon I discovered that -instead-, they were the larva of black wasps.

beliefs, norms, attitudes and values. If the classification of rubbish was achieved at the level of every household in Canoabo then, the volume of production of materials on a community level would be attractive for a recycling scheme and "waste" could be reused by recycling companies and the community would be paid for it. I made inquiries to few recycling companies in the cities of Maracay and Valencia that offered to buy the classified materials and soon started to calculate the potential monetary value of the inorganic matter and organic waste such as paper and cardboard.

While exploring the rubbish dumps I was also exploring through dialogue the local people's habits, attitudes and feelings of concern about "waste" and soon I started to conceive a cooperative of students and peasants of Canoabo for the classification of waste. The community could sale classified "inorganic" matter such as glass, plastics and metals to the companies for industrial recycling specialized on those materials and some "organic" materials such as cardboard, paper and rags would be reused as secondary sources of fibre for the paper industry. For sure, the recycling of other types of organic matter such as manures and food scraps on a municipal scale -by a cooperative of peasants and students-, would produce not only a good source of income for the community but it would also enable people to grow their own food without poisonous chemicals. One day, I found a word in the Spanish language that rimed

harmoniously with the "negative" concept: "Basura" (Rubbish, Waste, Garbage, Junk): it was "Tesoro" (Treasure). In a staff meeting of "Nucleus 7", I proposed an educational project for the community in Canoabo, entitled: "La Basura es un Tesoro" ("Garbage is a Treasure") which immediately raised bitter criticism from some members of the academic staff. Some of them were annoyed of seeing me carrying "dirty" rubbish bins with the help of students across campus; some did not want me to explore the "academic" rubbish dumps of the university with my legs covered with sludge up to my knees; some did not want me to breast-feed my two years-old daughter Valentina and some did not like to see me sitting on the open ground with the "students" in non-hierarchical circles under the trees, because it was "non-academic".

However, the nature of their criticism was related with the Venezuelan "political culture" of "partisanship"¹ since to be an activist of the party in government is the only way in Venezuela to get support, patronage and promotion. Not being a member of the major political party in government, -in this case, of the "Democratic Action" party AD-, the academic staff in Canoabo considered me as an "outsider" and they would not give me any support. Some, ironically started to talk about me as "Basurita" ("Little garbage") and their reactions of

¹ See Venezuelan "political culture" above in: 1.3. Political- Regional Context

political "apartheid" became more intense after I started to tell people around the university about my intention to run an "Extension Course" on non-polluting agriculture with no academic accreditation which attracted 20 enthusiastic university students of the three careers: "Rural Education", "Rural Administration" and "Food Technology". Only two lecturers were supportive of the business-side of the recycling project. Nevertheless, I sent two proposals to Caracas for the consideration of the Rectorial Council of the University entitled: *"Community Project on Recycling Garbage is a Treasure"* and the *"Extension Course: Methods of Non-Polluting Agriculture"*. Despite the lack of support from the academic male hierarchy of "Nucleus 7" in Canoabo with its chemically-minded agronomists and politically biased lecturers, the two proposals I wrote were approved by the Rectorial Council in Caracas.

c) Organization: I decided not to be enslaved by a budget but to use the community and the glorious natural environment that surrounded us as learning resources. The only two things besides my salary that I received from "Campus 7" -at a request of the secretary-, was a package of manila files and a ream of paper to keep the enrolment-records of the participants. I did not need to formally promote the course on "12 Non-Polluting Agriculture Methods" because all the people concerned heard of it by word of mouth. In September 1978 "we" -

the 20 university students, 12 people from other towns and cities and I-, met for the first time on campus in the yard of the "students cafeteria". I did not give any instructions, nor "course outline", nor objectives. Just open-questions, wait and listen. The process of learning initially proposed for all of us was based on intuition, improvisation and creativity and not on a premeditated plan, a written programme or a list of external resources. The group agreed to try.

Our learning process started¹, sharing and solving problems together. The 34 participants in the course consisted of: 20 university students formally engaged in the specialities of "Rural Education", "Rural Administration" and "Food Technology"; two local primary schools teachers from Canoabo and Canoabito and 12 people with the most diverse backgrounds who came specially for that course, travelling 1 to 5 hours from Caracas, Maracay and Valencia. Firstly, we learnt about each other, our backgrounds, motivations and expectations. Then, we realized that we needed a shelter for stormy days, formal lectures and indoor activities. After exploring around in small teams of 5 to 7 people, the group decided to recycle an abandoned chicken-shed on Campus with iron roof, cement floor, two walls of blocks and two sides of chicken wire and to use it as our "classroom". For our "chairs", the teams collected car-

¹See "Methodology of Learning", in Chapter 3.

tires and found old "academic" furniture such as bookshelves and tables in a dusty storage-shed; even the paper, the pencils, the "blackboard" and the chalk, were all recycled. For our practical skills sessions, the teams found many old and abandoned tools that only needed some repairs, an extraordinary abundance of five different manures, plenty of wild-vegetable organic matter and three big bins of kitchen scraps produced daily on campus. Some participants also found an abandoned shredder machine in the "Institute of Fruit Research" nearby and, when the administrator denied my formal, written request to give us the machine as a donation, I had to go there with the group, open the lid and show him a nest of straw full of mice inside the machinery. They immediately donated the machine to the project.

On the day of the "official" opening of our "new" classroom, the participants tied green vines instead of ribbon across the door and asked me to cut it: with no scissors to cut, I tried hard with my hands but I could not break them; then, somebody behind me said: "why don't you try with your teeth?". I did. And since that day I understood that collective improvisation within time and space, creative imagination, spontaneity and expression - that were for many years the core of my work as a dancer, teacher and choreographer-, were also going to be deeply integrated -possibly in a different way-, in all my future educational work. The group and I became a unity

as "we", without distinguishing "teacher" from "student" because everybody was a teacher and everybody was a student; "Nature-People" became our many "classrooms" until we blended ourselves into the social, political, cultural and ecological reality of Canoabo, trying to become aware and a conscious part of it. We developed our own theories, grounded in collective living knowledge of the reality and we started to put them into practice, working together.¹

d) Action: Our learning activities included sessions on "Dialogue and Critical Analysis" ² and were held mostly in open fields, sitting directly on the ground under the trees or up in the mountain on the gigantic boulders of the "Capa" river. For our "Pilot Projects" we started practical sessions on organic gardening with the teachers and children of the rural school in Canoabito, a small village with no road and dispersed within the forest covering the high mountains. We, therefore, had to walk every day upwards along a river for almost one hour in order to go there. For our sessions in classification of rubbish, that we named "Basurologia" ("Garbology"), we spent hours in activities of diagnosis of the rubbish-dumps of the university and in the areas of animal production with their disastrous pollution of the land and water caused by massive amounts

¹ See Chapter 4 and the 20 minutes video: "Garbage is a Treasure in Canoabo", 1978

²See "Methodology of Learning" in Chapter 3.



Pilot Project in Canoabito, 1978





Therapy Gardening 1977



of manures being flushed from the sheds directly into the streams with no filtering or purification. The participants started to talk with other students on campus and with people in town about consumerism, "rubbish" and recycling; about the risks of chemical agriculture and the ecological principles of organic agriculture. Participants from Maracay, Valencia and Caracas also started to develop pilot-projects in their own local communities. For example, a woman teacher and therapist, started a project in "therapy gardening" with children with intellectual needs cooperating with other teachers in Caracas.

In our search for organic matter for composting we explored not only the rubbish-dumps of the university and the town of Canoabo but the rubbish-sites of other villages nearby like "Canoabito" and "Los Naranjos". By chance, we also found -not only organic matter-, but the social hierarchical roots of local consumerism. Through critical analysis in our group we began to uncover different patterns of consumption of plastics, metals, glass, cigarettes, beer, rum, whisky, soft-drinks and "junk-food"; through comparative analysis of waste materials at the university and in town we were able to diagnose different socio-economic and educational levels of the population: "rich-educated" garbage at the university and "poor-illiterate" garbage in town. Living knowledge of the people and institutions, also revealed the oppressive and authoritarian "past" of Canoabo: a

hierarchical structure of landowners whose power was rooted within colonial times.

People and places became our "history books" through ecological activities of "Living Knowledge". Peasants living in remote areas of the valley knew through centuries of oral traditions, how to grow -with no chemicals-, a great diversity of food on a family and community scale. The old Venezuelan popular traditions of subsistence agriculture are based on the ecological and sustainable integration of wild areas with gardens-orchards-and free-range animals all of which is named by the peasants, "Conuco". It is a Venezuelan modality of subsistence agriculture which produce enough food for a family of peasants as an integrated eco-system, like a complex "orchard" which combines a rich diversity of pioneer plants such as annual legumes, grasses and medicinal weeds; biennial root crops, vegetables and aromatic herbs and understorey vegetation mediums size tropical fruit trees , canopy and climax perennial vegetation with giant hardwood trees. The "conuco" also includes free range animals like chickens and turkeys and there are regional variations; for example, in Maracaibo State, people dig in their back-yards shallow ponds for rising sweet-water fish and hang hollow tree-trunks from the verandas of their houses as beehives for tiny small bees which produce a very sweet and light honey. The rich diverse ecosystems of "Conucos" is a very important area of research for Venezuelan participants

and we found that this ecologically-sound, small-scale and sustainable way of food growing or "Conuco" was still in use in remote areas of the valley of Canoabo.

However -under the ideological influence of the university-, it was a prevailing belief in Canoabo of the miracles of "profitability" derived from the mythical assumption of "industrial development" and the "technological-scientific" approach to food production of elementary Chemistry sponsored by the government and petrochemical corporations. Hence, almost all the peasants have abandoned their traditional "Conucos" of subsistence agriculture, they instead were using deadly agricultural chemicals and they had become "employees" working under contract with private companies for growing exclusive mono-crops: for example coffee for the coffee industry to make "instant coffee", or oranges for the juice industry to make "instant orange juice". Some areas of the valley of Canoabo were a poor replica "Made in U.S.A." of the state of Florida or the "Orange State". With the introduction of "technological packages" of : chemical "fertilizers", pesticides and herbicides and with the mechanization based on fossil-fuels, the results were evident: monocrops were exhausting the land, making the environment vulnerable to insects and diseases and poisonous chemicals were intoxicating the valley. Besides, forced by the land monopoly of landlords or latifundists, the peasants had been confined for years to the same site and, as a disastrous consequence, the

"slash and burn" rotational cycles of 7 years had been interrupted with its evident effects in deep soil erosion. These neo-colonial invasion of the community was nothing new, since the colonial past was still alive.

Other learning activities of "Living Knowledge" included that the participants started to talk with the old people in the valley of Canoabo: some of them were more than 100 years old and still remembered stories of massacres, war, locust and poverty in the last century. Wise "healers" knew all the medicinal and spiritual properties of trees, water, earth and animals and they cured strange diseases, tumours and stings for example, of the deadly black scorpion, that the local doctors did not understand nor cure. Children and women were experts in wielding sharp "machetes" and they knew how to kill a deadly "cascabel" (rattle snake) in seconds.

Learning activities of "Team Working" included that the participants in the course on non-polluting agriculture also start to involve the workers of "Nucleus 7" in the community-project "Garbage is a Treasure". All the workers of the university were my neighbour-friends in the nearby town of Canoabo and all of them had been peasants before they became "employees" of the university. They were for example, the women cooking in the kitchen who started to separate and classify the organic and inorganic "waste" materials or the men cleaning and feeding the animals at the university farm

who started to save manures for us to use in our composting practices. The care-takers of the university buildings helped us to distribute in campus rubbish-bins of different colours for the classification of "organic" and "inorganic" matter. We started to involve more people and to develop concrete actions of classification and recycling of "waste" materials towards the possible creation of a cooperative of university students and peasants for selling inorganic "waste" materials to recycling companies and for making compost with the organic matter on a commercial scale.

Learning activities of "Theoretical Formation" of the participants in the community project "Garbage is a Treasure" and the extension-course on "Non-Polluting Agriculture", included the selection of a specialized bibliography on ecological issues; we had sessions of "collective reading" and we found "experts" to explain us -for example-, how to organize the cooperative of recycling. Other learning activities of "Team Work" included going door to door to interview people in the town of Canoabo in order to find out what sort of things people consumed and wasted and how much of it they produced individually every day, every month and every year. We also distributed questionnaires about "family waste" in every household in Canoabo. All those collective learning actions permitted the group to gather, to process and to interpret important data on the frequency, the amount and type of solid and liquid waste

produced in the whole valley of Canoabo. A rationale with budget included was prepared by the participants for setting up a cooperative enterprise and -at that point-, two university lecturers joined our group. They were interested in plans for the mechanization of the composting process on a municipal scale.

Activities of "Living Knowledge" of the reality, lead some participants to somebody who offered a large section of land close to the main road for the cooperative to set up a transfer-station of classified waste in the nearby city of Bejuma. Other participants approached the various recycling companies specialized on recycling paper, glass or metals that I had contacted months before, in order to actualize the prices they would offer to the cooperative for the different types of classified inorganic waste.

Learning activities of "Work for Practical Skills" permitted that, while the community project "There is a Treasure in Garbage" was at the stage of research, design and planning, the participants in the course were also learning the necessary skills on how to grow their own food using twelve different methods of non-polluting gardening and farming. Two peasants started to make

large compost piles using the "Indore" method¹, mulching their "conucos" instead of "slashing and burning" them. They also started to share their composting experiences with other peasants. In addition, the university sent a team to film the project and the course.²

e) Reaction While the extension course on "12 Non-polluting Methods of Food production" and the community project "Garbage is a Treasure" were taking place in our group, practically everybody else in Canoabo was involved in the campaigns of the political parties for the upcoming 1978 general elections. At the time of the "official opening" of the electoral campaign, our group could never have anticipated the "political robbery" of our "ecological image" that was going to take place.

Activist members of the Democratic Action (AD) and the Social Christian COPEY parties, were looking for new slogans and attractive jingles for their publicity through the media, especially T.V. So, the local authorities of Canoabo, -mostly members of AD-, decided to buy a new truck for rubbish collection and to use the

¹ "Indore", is the name of a town in India, where Sir Albert Howard (1873-1947), the pioneer of the organic method, spent seven years (1924 to 1931) of scientific research of the methodical decomposition of organic matter. Rodale & Staff, Encyclopedia of Organic Gardening, p. 547

² See documentary: "There is a Treasure in Garbage". VHS Video. Colour, 12 min. U.N.E.S.R., Venezuela, 1978

name of our community project: "Garbage is a Treasure" as a political slogan for their own electoral campaign, since they wanted to project an "environmental image". The following week a group of participants who were university students living in town, saw on T.V. an unusual political campaign of the AD party: the new garbage-truck of Canoabo was shown "in action" with enthusiastic workers collecting rubbish in the streets, while somebody said with a musical background, that *"...in Canoabo rubbish do not exist because "There is a Treasure in Garbage"*. In our next group session, shocked by the political manipulation directed from Caracas, all the participants had a session of critical "Self, Team and Project Evaluation"¹. We critically analyzed our actions in Canoabo and in relationship with manipulative concepts, values and assumption related to "Government", "Participative Democracy" and "Alternative Representation" of the people. We wondered the reasons why our educational process -being a "small" group of 38 people in a "small" and isolated town-, had become so important for the politicians to the point, that our ecological principles were being robbed and manipulated **on a national scale** as a public "environmental image" by a particular political party. We, as a group, did not want to be identified as members of the Democratic Action Party or of any other political party but -despite our useless efforts to find out who was responsible for

¹See "Methodology of Learning" in Chapter 3.

the propaganda in the T.V.-, we could not stop their political campaign broadcasted to all the nation from Caracas. Achievements and frustrations about this political situation were expressed individually and, finally, we collectively decided to dismantle the project "Garbage is a Treasure" until the end of the political electoral campaign and to re-start our activities after the elections, in February. Nevertheless, we continued the extension-course and I sent a report on the events to the academic authorities in Caracas which was acknowledged but without comments on the issue of the political campaign. The social-Christian party COPEY won the elections in December and then, attitudes of arrogance and selfishness of partisans of the Democratic Action AD, who were dominant at the university "Nucleus 7" and in the town of Canoabo, were changed into sorrow and humble silence.

I wanted to continue working in the community of Canoabo and found an opportunity to pursue my educational work in a different way and without the political pressure of the two political parties of COPEY or AD. One year before, since my arrival to Canoabo and in my free time "outside" university, I had started to teach ballet and modern dance to a group of twenty young women some of whom were students of the local high school, some university students and a primary school teacher. Working two or three hours of dance technique and rehearsals every day in the evenings and in the weekends, we started

the "Dance Workshop of Canoabo" with the purpose of training the group in setting up a "repertoire" of modern and folkloric dances and eventually, to be prepared to perform in public places. One day I was visiting one of my neighbours who was a very old peasant woman and, just for curiosity, asked her to explain me how people used to dance "in the old days" in Canoabo. She started to dance with me counting three steps to the right and three to the left in what she defined as the "Porka". It was astonishing that a woman who had lived in Canoabo all her life in the poorest conditions, who had never been in a city and who did not know how to read or to write, was able to explain in all detail the aristocratic "Polkas" and "Mazurkas": the favourite pre-classic dances, that for centuries were choreographed for the exclusive amusement of the European courts with their kings and queens. She told me that she learnt those dances in the famous parties celebrated annually in the house of one of the coffee landlords of Canoabo, to celebrate the arrival "from the capital", of his sons. Everybody in the valley used to say: "The Giles family are having a party."

My enthusiasm for the artistic research grew and ~ after many other interviews to many old people living in remote areas of the valley- I sent a report to the university authorities in Caracas proposing a new project on community education: the "Research on the XIX Century Traditions of Music, Poetry and Dance in the Valley of Canoabo"; traditions that the peasants had kept alive for

almost 500 years through oral traditions and artistic expressions. The document also explained the technical and artistic progress of the "Dance Workshop of Canoabo" and the possibility of producing a "Total Performance" based on the research, named: "The Giles Family are Having a Party"¹. At that time, after the general elections, the Rectorial Council were very interested in the cultural activity of the university and immediately the authorities approved the new community project. In that report I included the script for the "Total Performance" based on the results of organized data that I had been collecting for months during the weekends, through oral interviews with dozens of peasants of "Canoabo", "Canoabito" and "Los Naranjos" of different forms of music, poetry, dance, costumes and clothing :including the fashion underwear. Some informants were 100 or more years old: a "young" 80 year old peasant, Mr. Eustaquio Robles who lives in the most remote and isolated area, high in the mountains, was astonished that rainy day when I went to visit him and beg him to play his music. He knew that for me to be there I had to walk along the river for one hour, carrying my daughter in my back. It worth the effort, because he was the only peasant in the whole valley of Canoabo able to remember and to play the "Mazurka" -as his own grandfather had taught him-, in the "criollo harp": and he played it to

¹ "Giles" is the surname of one of the most prominent families of coffee landlords in Canoabo in the last century, famous for their frequent celebrations and dances.

perfection. In my search I also found three groups of peasants that have kept alive different musical traditions, willing to participate. Other peasants, men and women, started to participate in the evening and week-end rehearsals of the "Dance Workshop" held in the large "community room" behind the church of Canoabo. At the same time, six women in town began to sew the costumes with care to include the most minimum details given by the informants. Also, six male university students that had been participants in the community project and the university extension course on "Non-Polluting Agriculture", joined my quest for the artistic -and hierarchical, exploitative past-; eventually they became integrated with the women of the "Dance Workshop of Canoabo". We decided that our ecological awareness on the hierarchical oppression of local Nature and People will continue through art. In total: students and peasants, we were 40 people and finally, on the 19 of March 1979 -the most important day for the people of Canoabo- and after one week of festivities celebrating Saint Joseph, the rural community of about 800 people congregated in the evening around the central square. Elders came from far and wide away to enjoy -occupying seats of honour-, the 2 hours-show of a total-spectacle integrating music, dance, poetry and comedy: "The Giles' Are Having a Party".

The show not only was an exact replica of the beauty, grace, old customs, clothing, ornaments and

traditions of old days but it also revealed the oppressive feudal hierarchy of coffee landlords in Canoabo in the XIX century. The monopoly of coffee, richness and avarice; locust, hunger, poverty and diseases: all, was performed with Venezuelan sense of humour. "The Giles' are Having a Party", was performed by 40 peasants, high-school and university students and teachers. After the performance, many elders were crying with joy and some recognized in the dramatization of families in the XIX century, both: "the patrons" and "the servants". Mr. Eustaquio Robles told me after the performance, with tears in his eyes: "Ofelia, you have changed my life for ever." And he changed mine, too. That day, a cycle of ecological adult learning was completed in Canoabo.

f) Consequences. On a national scale: since my arrival to Venezuela in 1979 and organized by the Department of Public Relations of the university, some journalists started to interview me about specific ecological issues. Journalists such as Aristides Bastidas, Marta Aguirre, Asdrubal Barrios, Susana Rotker, Rosa Ustariz and many others, understood the importance of ecological principles and started to raise public awareness: on the destruction of the eco-systems; health risks of the chemical-industrialized food system; global food dependence; and the importance of growing food organically, local self-reliance and sustainability. Some articles focused on the substitution of a "Consumerist-

Waste-Culture" for a "Recycling Culture". Those articles generated concern in wide sectors of the population, that gave rise to greatly increased interest and demand for further learning.

On a community level, some people in Canoabo started to be aware of the ecological and social impact of the technocratic society in their local reality. People started to discuss on the possible substitution of a "consumer-waste culture" for a "recycling culture", although the critique of the food system and poisoning agriculture was not the central theme of our discussions.

On a participatory level, twenty university students who became participants in the extension course on "12 Methods of Non-Polluting Agriculture" and the community project "Garbage is a Treasure", started to practice critical analysis of the reality and the threefold evaluation: "self, team and project evaluation". Some individuals said that they were experiencing a learning process that challenged their own habits of passiveness and attitudes of dependence in relationship with their lecturers at the university. We analyzed ourselves within the public and private educational system of "schooling" and remembered the many situations that reflected our own attitudes of passiveness and dependence under the authority of our teachers. Most of the participants expressed that, for the first time they were experiencing a horizontal

environment of freedom to learn, taking decisions in small teams, planning, implementing and executing actions and evaluating themselves instead of expecting the "teacher" to do it for them. Learning processes of knowing each other, living knowledge of Nature and People of Canoabo, working with the land, learning new practical skills and activities of theoretical formation¹, such as formal lectures and bibliographical research, raised the awareness of the group. Internal organization in small responsible teams, solving problems together, became a first step for positive action towards collective change within the group. Activities of sharing and discussion for critical analysis of the reality, became progressively more mature and complex, while we -the participants-, were building up our individual consciousness towards new ecological habits, attitudes and values.

On an individual level, 34 people that started as individuals, with the most diverse backgrounds participated in the ecological learning process for eight months, supporting each other in their learning activities. They were 20 university students, 2 primary school teachers and 12 people that came from the cities nearby. Later, two university lecturers and two illiterate peasants also joined the Ecological learning process. For one year, the individual and collective

¹See "Methodology of Learning" in Chapter 3.

participation was constant, dynamic and enthusiastic. Nobody withdrew from the course, regardless of not having any comforts such as transport or a classroom and toilettes nearby; to work very hard in very difficult climatic conditions, to have only a few resources and tools -and some participants-, to had to travel for two or three hours each week. Since nobody withdrew from the course or the project and for all the above reasons, I -subjectively presume-, that the process of ecological consciousness fulfilled special and important learning needs of adults, however their individual differences would be in socio-economic status, cultural and educational level. It is maybe a "subjective" presumption, since all the evaluation was done through face-to-face dialogue and I did not kept written records of the statements or self-evaluations of the people involved. Also, I was not interested in "following-up" people after the course.

To have to interrupt the educational process in Canoabo for reasons of "political robbery" of our ecological principles to be used as an "environmental image", was a painful experience but since then I understood that for the educational processes to last long and permanently, many more people would have to learn how to facilitate ecological learning processes in the community. As my dear friend, Lutecia Adam, told me once: "If you want this to continue, you will have to set up your own "school". And it must be done quickly,

teaching teachers to teach themselves and other teachers. I started to think on how ecological principles integrated with social processes would attract adult teachers, social workers, agronomists or any other person already with experience in community and adult education, since they could expand the educational multiplying effect. Also I started to think on how to start a generation of pioneers with skills, knowledge, social and ecological values, able to design and implement pilot-projects in the community.

2) Stage 2. "Educational Programme on a National Scale" (May 1979-November 1982)

a) Background This stage started when I was living in Canoabo and received a formal invitation to act -in my position as a lecturer of the Simon Rodriguez National Experimental University-, as an special adviser "Ad Honorem"¹ for the Office of the Governor of the Federal District in Caracas.

I was going to design and coordinate for the Office an educational programme on a national scale, centered on community self-reliance, small-scale community projects and integrated eco-technologies for the continuous production of food, energy and shelter on a local and decentralized scale. The programme was sponsored from

¹ An executive position which does not include salary.

July 1979 by the Office of the Governor of the Federal District, the Prefecture of the Libertador Department and the Simon Rodriguez National Experimental University (U.N.E.S.R.), with the financial and technical support of 45 public and private institutions.

The above stage culminates with my departure from Venezuela to come to New Zealand on the 16 of November 1982 and the continuation of the Venezuelan educational process from 1982 until today.

b) Preparation: In May 1979, two friends of exceptional humanitarian qualities, Margarita Cardenas and Maritza Barrios came to Canoabo to invite me to go back Caracas and to start there an educational programme on "organic gardening" for the poor neighbourhoods where people live in miserable conditions, counted by thousands of slums that surround the capital city. Under the new social-Christian government COPEY, both women had executive positions in the Department of Social Development of the Governor's Office of the Federal District. They were convinced -and convinced the new Governor and me too-, of the importance of the ecological learning process that I could bring to wide sectors of the population, specially for the benefit of poor people living in miserable urban environments and enduring painful food scarcity.

We critically analyzed the risks of my involvement, after the frustrating experience of "political robbery"

of the ecological principles of the community project "Garbage is a Treasure" in Canoabo, that were used as an "environmental image" by the "Democratic Action" party. I was reluctant to be manipulated again -this time, by the Social Christian party COPEY-. I argued that they, would eventually would attempt to use the ecological principles advocated by the educational programme as a slogan for their own biased pre-electoral campaign. After many meetings and discussions, Margarita and Maritza convinced me that we had a unique opportunity in our lives to do something important to challenge the social roots of consumerist oppression in Venezuela and to ecologically influence the process of policy-making. We discussed that for expanding the educational programme to national levels it would be kept -as much as possible- far from political rivalry, manoeuvres and competition between the political parties. Firstly, we had to "neutralize" the political rivalry of the male dominated hierarchy of the two institutions that would be involved as sponsors of the national programme: on the one hand, the Rectorial Council of the Simon Rodriguez University -where I was working as a lecturer-, was the patriarchal domain of partisans of the secular "Democratic Action" party. On the other, the Governor of the Federal District and all the new government administration -where Margarita and Maritza were working-, were mainly fervent Catholics and partisans of the Social Christian party COPEY. Secondly, Margarita, Maritza and I agreed that the educational programme would incorporate all sectors of the community

trying to keep a balance of individuals, of public and private organizations and of members of the many different political parties. We had to organize ourselves and to act as quick as possible for three years, in order to achieve the ecological aim of "Unity in Diversity" before the political taking-over by political greed of the next general elections in December 1983.

c) Organization. Firstly, our internal organization had to work on conflict resolution on a political level. In May 1979, the political climate in Venezuela after the general elections was very tense and the process of transition from the "old government of the "Democratic Action" party into the "new" government of COPEY, created internal conflicts at all levels of public administration. Margarita, Maritza and I had to overcome great political obstacles since the university and the Office of the Governor were controlled by committed leaders of the two rival parties, competing for power and control. We started to find the basis for an effective communication and positive cooperation between the two institutions, working closely with some members of the "Center for Experimentation of Permanent Learning" : Anders Hallstrom, Andres Blackwell and Lucio Segovia, and also with members of the "Department of Public Relations" of the university, coordinated by Lutecia Adam. A group of five people became responsible for "conflict resolution" between the two institutions and they started a series of meetings and discussions with some academic

authorities about the convenience for the university, to work in partnership with the Office of the Governor.

The results of that "diplomatic" work at a high level of political decision-making involving two important public institutions, were seen on June 1979: when the Governor of the Federal District sent a letter to the Rectorial Council of the Simon Rodriguez University inviting me as an adviser "Ad Honorem" in order to design, to plan and implement an educational programme on a national scale towards ecological self-reliance of the community. The proposal was approved by the academic authorities and they authorized me to leave "Campus 7 Canoabo" to come back to Caracas and to work on exclusive basis for the Office of the Governor.

Secondly, it was necessary a written proposal. In May 1979 -while I was still living in Canoabo-, I started to write a proposal to the Office of the Governor of the Federal District, including the guidelines for the educational programme on a national scale. The document detailed the ecological philosophy, the aims and goals; the long, medium and short term objectives; the contents of learning; the method of adult learning; design and plan for the implementation of a model center for the research, demonstration and learning of integrated and small-scale ecological methods and techniques; human - individual and community- resources; physical and institutional resources; educational strategies and

actions; internal organization; programme evaluation and procedures for "models" of the programme to be reproduced by any other group in any other place in the country and adapted to local needs, through "Pilot Projects" in, for and by the community.

The core of the programme was a full-time course for teachers, adult educators and social workers to become "multiplying agents" of the educational work in the community. The title of the March 1979 course proposal was: "Training Course For Instructors on Recycling, Non-Polluting Urban Agriculture and Other Ways Toward an Ecological Society", "...where people could live in harmony with themselves, with others and with Nature..." which later became better known as: "Hacia Una Sociedad Ecologica" which was the name I gave to the fifth theme of the programme.

I must say that nine years later in 1988, when I decided to re-start university studies, I discovered at the Library of the University of Canterbury in New Zealand a book with the same title -but in english-: "Toward an Ecological Society", published in 1980 by Murray Bookchin¹: I wish I had read the book ten years earlier as it would give me some of the necessary theoretical guidelines I needed in 1979. In 1988 I

¹ Bookchin, Murray: Toward An Ecological Society, Black Rose Books Inc. Quebec, Canada, 1980. Second printing, 1986. 313p.

discovered that there is already a "New Zealand Ecological Society"¹ and that since "ecology" or "ecological" are very ambiguous concepts, they also could serve to conceptualize social hierarchy.

Thirdly, in our organization it was necessary to incorporate "Inter-institutional cooperation". This was a strategy of "institutional partnership" between public and private institutions. Margarita, Maritza and I understood that if we had the political support of the Governor of the Federal District, the educational programme of "Organic Gardening in Caracas" would not have to be limited to a capital-centered action. We thought to launch the programme "Towards an Ecological Society" on a national scale but, -because it would be very difficult for one institution to cover the total finance of such national enterprise-, the Governor would have to appeal to public and private institutions for financial and technical support. Hence, we made a list of 60 possible institutions that would be invited to participate in the educational programme and asked to send their delegates to a meeting. This area of exchange, partnership and cooperation between different public and private institutions was going to be a very important educational strategy and would be named "Inter-institutional Cooperation". The major sponsors of the national programme: the Governor's Office of the Federal

¹ A society that promotes ecological science. P.O.Box 25-178. Christchurch, New Zealand.

District and the Simon Rodriguez National Experimental University, invited representatives of other public or private institutions specially those that were coordinating community "development" programmes, non-governmental community organizations, neighbourhood organizations and environmental groups. They were invited to participate as "partners" with the common effort of implementing the programme in the practice. This policy of inter-institutional participation in partnership enabled to expand the range-base of human, physical and institutional resources. For example, the participatory institution sent members of their staff to courses and they received after the course all the teaching resources, the technical support and the necessary advise for developing their own community Pilot Projects, free of charge. In exchange, that institution would provide specific resources such as: a) technical services and advise (eg: a specialist in solar energy or in food preservation; or a professional artist to draw a teaching poster; or a temporary printing service; or transport on a temporary basis; b) or physical resources such as classrooms, auditoriums or conference facilities on a temporary basis; or audiovisual equipment, tools or land). c) or finance a specific project such as an audiovisual, a brochure or a poster). The cooperation and exchange of human and physical resources involved 46 different institutions.

d) Official Inter-institutional meeting While I

was writing the proposal document in Canoabo, Margarita and Maritza were organizing an important meeting in Caracas. The launching of the national programme "Towards an Ecological Society" and my appointment as an adviser of the Governor's Office was held on the 11 of July of 1979, in public ceremony at the Conference Hall of the Office of the Governor of the Federal District. In attendance were the Rector and other academic members of the Simon Rodriguez University, official representatives of eight Ministries (Environment and Natural Resources, Education, Information and Tourism, Youth, Agriculture and Livestock, Energy and Mines, Health and Social Welfare); six National Institutes and three other Universities. Margarita and Maritza also invited the Ministry of Defence for the possibility to develop pilot-projects in the isolated communities living along the frontier borders, through the "National Guard", a special body of the army whose special and exclusive duties are the "Conservation and Defence of the Venezuelan Environment and Natural Resources". After the formal protocol and personal introductions, all the guests were welcomed and invited to participate and to join the process "Toward an Ecological Society". We distributed a copy of the proposal-document to each person and I explained the programme to the "visitors", step by step, using big charts on the walls. Then, I proceeded to introduce the course for "Multiplying Ecological Agents": adult teachers, community workers, agronomists, community leaders and so on. I detailed the aims, contents of

learning and educational strategies for community action.

e) "Course for "Multiplying Ecological Agents"

These were people for multiplying the educational action in the community, guided by ecological principles. The proposal was centered on a 15 weeks full-time course designed exclusively for people with long experience in adult and community education. The majority of participants were employed professionals while others were members of voluntary groups and non-governmental organizations. These participants were selected on the basis of their previous experiences in working -in, within and for- the community: some were activist or leaders of neighbourhood and community organizations and social workers in the municipalities, representatives of environmental and health groups. The selections also included university students with social concerns, teachers, nurses, agronomists, therapists, directors of libraries, directors of parks and recreation and coordinators of diverse adult educational programmes. People employed by public institutions such as ministries and autonomous institutes were invited by special invitation made by the Office of the Governor of the Federal District; the institutions would sponsor their staff while they were attending the course in "Caricua Center" after which they would have the necessary support for developing their own local "Pilot Projects"¹ to

¹ See Chapter Five

enefit the community all around the country.

f) Aims Of the Programme "Towards an Ecological Society" These were presented in the Inter-institutional meeting of the 11 July of 1979 at the Office of the Governor of the Federal District.

To protect the balance of Nature and Society, essentially inter-connected and indissolubly inter-dependent "Towards an Ecological Society" were People could live in harmony with themselves with others and with Nature.

To encourage, to promote and to facilitate on a national scale an individual and collective learning process and organized community actions for change towards a society whereby people may live in harmony with themselves, with others and with Nature.

To develop an ecological culture, values and ethics, which include integrated ecological methods and eco-technologies in accordance with five ecological principles of: "Interdependence of Life Cycles", "Return of Organic Matter", "Unity in Diversity", "Soil-Plant Relationship" and "Clean Renewable Energy". These principles can be realized on a practical and small-scale level by the community, adapted to the local reality and using local resources to fulfil the specific needs of each community.¹

To demonstrate practical examples of non-polluting methods and eco-technologies and to work towards the practical implementation of integrated eco-systems for sustainable, small-scale and self-reliant development of the community.

To become a "multiplying ecological agent" of the educational process in order to facilitate creative, participatory and empowering learning processes in ourselves and in our local communities.

To develop special pilot projects in the community in order to fulfil the needs of learning of children, young people, adults and people with specific physical or mental disabilities or confined in jails or hospitals.

¹ These integrated principles are realized on a practical level through different methods and techniques. See Chapter 5.

To design and implement an educational model-center (or centers) for individual self-realization and self-transformation, for participatory learning, research and creative learning processes of the community. The center (or centers), focusing on ecological methods and techniques, will be opened to the public for practical demonstrations and educational exhibits of integrated small-scale, self-reliant, sustainable and perennial eco-systems for the production of food, energy, shelter and what is necessary for achieving "an ecological society" on a community scale.

When I finished the presentation of aims, contents of learning, methods and strategies of learning¹ of the programme: "Towards an Ecological Society" at the "official meeting" on the 11-7-79, some individuals immediately accepted our message immediately with no barriers: they reacted enthusiastically with interesting questions and comments and expressions of approval and encouragement. Others, looked more sceptical and moderate. But we were sure that nobody in that room was indifferent to our enthusiastic ecological message.

It is important to remember that these individuals attending that meeting were officially representing public and private institutions and non-governmental organizations: from that day, the 11-7-79, more than 45 public and private organizations cooperated in one way or the other -with their human, physical and financial resources-, to the realization and practical implementation of the programme in Venezuela until today.

¹ See Chapter Four for a detailed "REAL Guidelines for Action"

g) The Systematic Poisoning of People and Nature

The educational programme on a national scale during 1978-1979 was an intense process aimed to empower the individual and their communities towards ecological actions for social change. Our first educational actions concentrated on challenging consumerism. We challenged the "waste culture" with the "recycling culture" and challenged the business-industry of "junk food" with the community-made "wholesome food". The programme also challenged the "centralized, polluting energies" based on the industrial system of exploitation of fossil-fuels and hydroelectric energy. Eventually, with the participation of the Ministry of Energy and Mines it was possible to start a "Laboratory of Clean Renewable Energies" in the Educational Center that we implemented in Caricuao since 1987. We also started educational pilot-projects for community actions towards local, decentralized and integrated systems of "clean and renewable energies" by the sun, the wind and methane gas.

However, the educational proposal in Venezuela during 1978 and 1979 did not really challenge the multi-billion dollars business of industrial-chemical agriculture based on toxic and lethal substances commonly and erroneously known as "pesticides", because the initial emphasis of the programme was on urban "organic" gardening at levels of school, family and small-scale farming in the city.

I will argue that the concept: "**Pest-icide**" is a generic term which has been manipulated by petrochemical

corporations to make people to believe that any living organism that interfere with the profits of the agribusiness, is a "pest". "Pest" is an ideological invention made into a profitable commodity by those petrochemical corporations in order to justify their sales of billions of litres of their killing substances every year, in every country in the world. These substances are better defined as "bio (life)" or "eco" (house) ~"cides" (killers)". For fifty years the chemical industry has sponsored the film industry and commercial propaganda that created and popularized images of insects bigger than a city or devastating swarms or insect crowds. Hence, with a propagandistic military mind, for killing these "pests" "attacking" the crops "effectively and definitively" it was necessary to justify the "heroic" image of poisons that supposedly "save" humanity from hunger. The logic of this assumption is: if were not because of the "pesticides" all humanity would be starving. As a result of these manipulated logic of poisoning People and Nature, tonnes of synthetic killers such as "insecticides", "rodenticides", "fungicides", "nematicides" or "herbicides" are daily transported from one continent to another which shifting represents a multi-billion profitable venture.

In the reality, the exaggerated presence of insect, rodent, fungus, bacteria or virus in the industrial-chemical and mono-cropped agricultural fields of the XX century has to be analyzed not as the **cause** but as the

consequence of an ecological imbalance: the interference with the balances of the eco-systems initiated and sponsored by the global hierarchical system of agribusiness. These organisms erroneously named "pests" reproduce in an accelerated way and "attack" the chemically grown crops, precisely, because there is "something wrong" with them. The exaggerated presence of these insects, "weeds" or diseases are just indicating that there is an imbalance in the inter-related ecosystem of soil, plants and their predators. The nature of this imbalance is mainly based in various assumptions, one of which is the consideration of "Chemistry" as the "scientific" basis of industrial food production.

The actual system of food production -polluting, artificial and unbalanced- that has been made official and institutional by governments "as a necessary devil" all around the world -with the pompous title of "Scientific"-, is also known as "Industrial", "Technological" and "Modern" Agriculture. The reason of this paradox must be searched in the origin of "Chemistry" as a science and the role of an eminent scientist, Justus von Liebig (1803-1873). At the time of his birth, Chemistry was "the mother of all sciences" and von Liebig went to study it in France, the universal center of Chemistry. It was generally assumed that it was a "living force" or "elan vital" in living organisms that could not be controlled in the laboratory. The difference between "organic" and "inorganic" matter was

established and three groups of substances studied: the mineral substances, relatively "simple"; the non-living "pure products" extracted from living, organic matter, considered as special chemical compounds; and true fluids and fibres from animals and vegetables which -being highly organized- were classified as "organic"¹. This approach to life as something special and unified was going to change when Marcellin Berthelot (1827-1909) explained the possibility of chemical synthesis of organic matter to reduce it into simple elements such as Carbon, Oxygen and Nitrogen. It also changed after Justus von Liebig established the first laboratory of chemical analysis in Germany. His personal fame as a scientist, the success of his publications and research made Germany the most important center of Chemistry and contributed to the general acceptance of his scientific authority. Justus von Liebig decided to scientifically demonstrate that the popular belief that the plants feed on humus, was false. He argued that the firsts plants -liquens- could not feed on humus but on minerals and water; because humus is the result of plant decomposition and because plants at that time did not exist, hence, the liquens did no feed on humus. He went further and executed a bizarre experiment in his laboratory burning a plant and reducing it into ashes which made him to conclude that the main elements produced in the process

¹ Leilester, H.M. Panorama Historico de la Quimica, p. 312. Spanish version by Federico Garcia Portillo. Edit. Alhambra, S.A. Madrid, Buenos Aires, Mejico, 1967.

were Nitrogen, Phosphorus and Potassium (N.P.K). He assumed that since organic matter decomposes slowly, it would be better to make possible that these elemental substances could be used to feed the plant faster. To achieve the quick release of the elementary substances, then, organic matter would have to be made highly soluble, and this is precisely what Justus von Liebig did: he made up the first "superphosphate" dissolving bones in acid. At that point his friend, the Swedish chemist J.J. Berzelius, argued that "...I do not agree with your opinion that carbonic gas, ammonia and water are the only nutritious substances for the plant and that the soil has no other function than to make up these substances"¹. The analytical chemistry grew to the point that in 1842 the effects of "chemical science" started to be adopted by the agricultural business of the "Industrial Revolution". There were "urgent" needs of growing crops quickly for "feeding the masses" that had left the country to go to the industrial urban centers. English chemists followed the steps of von Liebig and started their own laboratory experiments trying to achieve the solubility of organic matter reducing it into "salts". English chemists such as J.H. Gilbert (1817-1910) and J.B. Lawes (1843-1910) started to produce nitrogenous "fertilizers", followed by the commercial manufacturing of soluble "super-phosphate" in 1842, by soluble potassium in 1861 and -in 1910- by the industrial

¹ Quoted by Rusch, H.P. in La fecondite du Sol p. 310

production of ammonia.

According to the "Natural Food and Farming Magazine"¹, after the Second World War, industries that were used for the manufacturing of explosives were changed into the manufacturing of "chemical fertilizers". The small industries were taken over by giant corporation such as W.R. Grace, Allied, Dupont, and Olin Mathieson and petrochemical corporations such as Gulf, Socony and Mobil, took over the entire market. Companies of natural gas manufacturing anhydride ammonia -an important ingredient in the manufacturing of nitrogenous fertilizers also boomed with the agri-business. Even those companies that had been producing organic animal fertilizers or blood and bone such as the Armour and Swift, also shifted towards chemical "superphosphate". The United States, due to its large mineral reserves and its exclusive exploitation of raw minerals in the Third World became the first producer of "chemical fertilizers" in the world- and the first consumer-.

Firstly, the use of "chemical fertilizers" is based on the dualistic-oppositional assumption that the plant, considered as a single organism, live separately and independently from the soil. On the contrary, the scientific research of Hans Peter Rusch has demonstrated

¹ Natural Food Associates, A Legacy of World War II. Chemical Fertilizer-War Against our Environment, p. 2. in: "Natural Food and Farming". Atlanta, Texas, U.S.A., November, 1977

the total integration of the "soil-plant relationship" as an inseparable unit through a permanent cycle of exchange of living substances...

Researchers had already prove that the plants are able to absorb organic molecules with a high molecular weigh. H.P. Rusch goes still further since he admits the existence of a "cycle of living substances": the living particles will stay intact during all the biological cycle, the soil included, and they will be absorbed by the plant roots.

Erroneously, the chemical analysis that reduces Life into simple elements as the basis of the "Elementary Nutritional Doctrine" assumes that the plants feed on "elements" such as nitrogen, phosphorus, calcium and potassium. As a result, the emphasis of "chemical agriculture" is on feeding the plant and not the soil.

The total biological conception of "soil-plant" of H.P. Rusch -which in the reality is an ecological conception-, has uncovered the myth and the "...absurdity of the dogma of mineralization, according to which the organic matter would be transformed into simple mineral substances before being absorbed by the plants in the form of ions"¹. Based on the above "absurdity" the petrochemical industry produces every year millions of tonnes of "Chemical fertilizers" which are highly soluble synthetic salts: they interfere with the natural cycles of living substances in the soil making the plants grow faster and bigger while killing the soil life, compacting the soil and destroying the unity of the soil-

¹ Rusch, La Fecondite du Sol. Preface by Claude Aubert., p. 13

plant organism. The chemically fed plants can be compared with a drug-addict person or one permanently "fed" with intravenous solutions; and since the plants are "forced" to feed quickly, they have to compensate the intake of (soluble) salts with excessive absorption of water¹.

These plants artificially fed are imbalanced and susceptible to insect attack and diseases. To make things worse, the absence of diversity and complexity in the agricultural fields of extensive mono-crops makes the system weak, vulnerable, unhealthy and highly susceptible to stress. This lack of diversity also makes the plants susceptible to imbalances such as insect attack and diseases caused by bacteria, virus or fungi. On the one hand, specific insects and diseases specialize on a particular botanical family of plants. For example, the "solanacea" family of potatoes, tomatoes and peppers are susceptible to the same insect-attack and to the same diseases which in turn, are totally different to those preferring the "brassica" family (cabagges, cauliflowers, etc.). A particular insect will reproduce and multiply in an accelerated way and will "attack" a particular crop because **that** is its "favourite" crop and because it is very easy to find when is growing on a commercial scale as a "mono-crop" over hundreds of hectares of agricultural land. On the other hand, the use of biocides

¹ See: Allaby & Allen, Robots Behind the Flow, p. 7-8

make the imbalances of the ecosystem worse because they also kill predators of insects and other beneficial organisms; those few organisms that survive the effect of poisoning develop resistance which is genetically passed into the next generation, making the poison totally "inefficient". This "resistance" to the poison is the reason why the companies have been constantly trying to find different -and more lethal- formulas.

For more than sixty years a global system of "scientific chemical" agriculture based on poisons has been approved by the governments as the official -and legal- way of growing food. On the contrary, different methods of non-polluting agriculture have demonstrated that those poisons are not necessary at all:

"It does not exist any analytical method of measure of the quality of food but only biological and functional methods. The usefulness of a foodstuffs can not be measured, except through the living process in which it intervenes as a nutrient; the chemical analysis is a method without a reference, since it can never predict how a biological substructure will react."¹

Based on the real "fertility" of multiplication of soil life-, and the diversity of polycultures which harbours a balanced population of insects and their predators, "organic" agriculture have demonstrated that "organically grown" plants are nutritionally and environmentally balanced, as well as strong and resistant to insect attack and diseases. There is an abundant body of scientific body of literature that

¹ Translated from french. Rusch, La Fecondite du Sol, p. 33

compare the "chemical" and the "organic" systems¹.

Nevertheless, because in 1978-79 I was mainly concerned with the urban communities, my educational efforts concentrated on gardening and not on large scale agriculture. When I started the educational programme in Venezuela my initial position was moderate and without openly confronting or challenging the agro-chemical food system and the hierarchical society sponsoring it and supported by it. My "neutral" position was going to change after I had an insight on the devastating effects of the relationship between "adult education" and the systematic poisoning of People and Nature with chemical *biocides*, on the 24 of September of 1979.

I recognized the bitter smell of biocides when travelling by bus with two hundred other delegates to the "Second Congress on Latin American Environmental Education", in our way to visit the small rural town "Bailadores" of Merida State in the Venezuelan Andes. Feeling very sick, I looked through the window and saw dozens of peasants climbing the sides of cultivated

¹ For some comparative scientific research on conventional-synthetic, organic and or Biodynamic agriculture, see:

IFOAM Bulletin N0 26, third quarter 1978, Analysis of Organically Grown and Conventionally Grown Foods., p. 7.;

Lokeretz, W., Economic and Resource Comparison of Field Crop production on Organic Farms and Farms using Conventional Fertilization and Pest Control methods in the Midwestern United States. p. 157 in Towards a Sustainable Agriculture, IFOAM, 1977.

mountains wearing simple cotton T-shirts, wearing no shoes, masks, gloves or hats, carrying tanks on their backs and spraying, surrounded with white clouds of poisonous gases of maybe insecticides or herbicides. At that moment I was alarmed and wondered how many Venezuelan peasants would die that year poisoned by biocides:

...every minute of the day, on the average, someone is poisoned in the third world. This World Health Organization statistic amounts to 500,000 poisoned people every year. A pesticide-caused death occurs every hour and 45 minutes, totalling at least 5,000 each year. Yet these estimates tell us nothing about the number of cancers, miscarriages, deformed babies and still-births resulting from the use of pesticides.¹

Later, the doctor in charge of the rural clinic of "Bailadores" made a slide presentation -for the delegates to the congress- of seriously deformed children with half divided faces, without mouth and eyes or with cleft palates, twisted arms or legs and spina bifida². He said that none of the children could survive beyond five years of age and since the infant mortality and spontaneous abortions rates were so high, he decided to test the blood of umbilical cords, placentas and fetuses; he also tested the milk of the mother's breast, discovering high levels of insecticides, herbicides and fungicides

¹ Weir & Schapiro, Circle of Poison, p.11 . Source of data: Starr, D. "pesticide Poisoning Alarming", says FAO(*)
Christian Science Monitor, Feb. 1 1978.
(*) (Food and Agriculture Organizations- UNited nations)

² See report: Kricker, A. & McCredie, J. & Elliott, J. & Forrest, J.: Women and the Environment: A Study of Congenital Limb Anomalies . Department of Surgery, University of Sydney, New South Wales, 2.006.

commonly used in "Bailadores". Five years later, mother's milk became a human right issue:

That mothers's milk is more contaminated than any other food is because it is on the very top of the food chain. A woman is using her fatty deposits in a different way during lactation than a cow. All the accumulated poisons come out in the milk. The older the mother is, when she gets her first child the more poisons she has accumulated.'....' In the Third World countries the situation is alarming..¹.

The doctor of "Bailadores" had continued his research for five years with consistent conclusions and evidence of the direct link between chemical biocides, infant mortality and permanent physical and mental disability of children. But he was not permitted to publish his findings by strict orders emanated from his superiors through a ruling from the distant Main Hospital of Merida City. After the slide presentation, I went to interview the people in town and the staff in charge of the local agricultural center in "Bailadores"; the peasants were being taught by agronomists and agricultural "experts" how to grow commercial monocrops, using synthetic "fertilizers" and biocides that have been banned or severely restricted in the First World. The systematic introduction in Venezuela of chemical "fertilizers" and biocides started in the 1940s, with the "Agrarian Reform" coordinated through experimental research stations of the National Agrarian Institute.

¹ International Federation of Organic Agricultural Movements IFOAM, Mother's Milk-A Human Right! , p. 23. Internal Newsletter n0 5, 1984.

"Agronomist Engineers" were graduated at the university by the thousands and many thousands more, as technicians specializing on poisoning agriculture. In the community of "Bailadores" it was general consensus and accepted assumption, that "educated doctors" and "people with culture" -such as the agronomists that came from the city to "Bailadores" employed by the government-, knew better than the peasants how to grow food; hence, they were entitled by the government to teach agricultural skills "for the benefit" of the community: their traditional subsistence agriculture instead, did not have any value:

Agricultural 'development' or modernisation has split the activity in two sectors- the highly visible, globally planned and controlled and state subsidised production for profits and markets, and the less visible , sometimes invisible, decentred self-provisioning of food through what is commonly called subsistence farming."¹

The agricultural "development" was evident: I visited big sheds for the storage of thousands of litres of poisons, tools, sprayers and hundreds of sacks of synthetic salts or "fertilizers" and hybrid seeds for the peasants to use.

At that sight, I understood that all the official system of the "Agrarian Reform" in Venezuela, would be a replica of "Bailadores". I understood that those children I had seen earlier in the slide presentation -with no

¹ Shiva, Staying Alive. Women, Ecology and Development, p.113

eyes and mouths-, were not the only ones in the country. Also that day, I understood that my reformist role as "environmental educator" would never be "neutral" again: the poisoning of People and Nature was a systematic act that had to be urgently challenged.

Months later I went to visit the area of "Turen" in Portuguesa State, to interview the local doctor. Being Portuguesa a favourite state for "agrarian development", I presumed that the poisoning levels in "Turen" would be as high as in "Bailadores". Again, the doctor in town was puzzled by the high incidence of children born with no eyes. There is a coincidence between this Venezuelan children born "blind" and baby deer also born "blind" in the U.S.A., as Carol Van Strum says:

Several families reported being poisoned by eating berries from sprayed roadsides. A logger called, upset about the number of blind fawns (deer) he had seen over the past few years. 'Their eyes are all shrunk up', he said, 'like the eyeballs and sockets didn't grow, and they bump into things. If the doe moves a little too far from them, it's all up. They don't make it very long, anyways.' He wondered if the herbicides could be causing the blindness. We didn't know.¹

The above case is referred to the effects of the weedkiller 2,4,5,-T,². In its manufacturing process, "dioxin" or TCDD -the most toxic substance on a per weight basis known today-, is produced; it has been

¹ Van Strum, A Bitter Fog. Herbicides and Human Rights, p. 80-81.

² 2,4,5, Trichlorophenoxyacetic acid has been given 98 different brand names. International Organization of Consumers Unions: The Pesticide handbook. Profiles For Action, p. 117

banned in twelve countries, including the U.S.A., but is still manufactured by the Dow company in the only two countries that permit their operations: Peru and New Zealand (by the Ivon Watkins-Dow). Many years after, I saw pictures of children similar to the Venezuelan children of "Bailadores" and "Turen", totally deformed with cleft palates, twisted bodies, absent organs and spina bifida. ; they live with their mothers in countries as distant from each other as Malaysia¹ and Australia², in agricultural areas sprayed with organochlorine biocides and other lethal poisons³.

Biocides that have been banned, heavily restricted or under review in some "First World" countries, are being produced and traded in the "Third World" by the companies: Allied Chemical, Amvac, American Cyanamid, Chevron, , Dow, Dupont, W.R.Grace, Hercules, Hooker, Kerr-McGee Chem., Monsanto, Montrose, Pfizer, Rohm & Haas, Stauffer, Union Carbide, Velsicol; BASF, Bayer, Celamerck, Hoechst, Schering (W.Germany); Ciba-Geigy (Swiss); Imperial Chemicals (UK); Shell (UK-Neth.); Sumitomo, Nissan (Japan). Some "First World" countries are also opened to the manipulation of these petrochemical corporations. Governments all over the

¹ See: Weir & Schapiro, The Circle of Poison. Pesticides and People in a Hungry World, p. 67

² See: Lowe, Bitter Harvest of Deformity Blamed on Farm Pesticides: Banana resort town at war as crop-dusters continue swooping. p. 4 in "The Weekend Australian" 10-11 1988 p.4.

³ Weir & Schapiro, Circle of Poison, p. 79-80.

world are holding the position that there is "lack of scientific evidence" on the poisoning and destruction of People and Nature by agro-chemicals. Many official institutions are contributing with the systematic and deliberate act of violence against People and Nature by petrochemical corporations¹. These, as well as pharmaceutical corporations are dumping in the Third World their poisonous products that have been absolutely banned in the First World. With the consent of the governments, these companies are able to mask the dangers of their products:

...on the crucial point of confidentiality, the chemical's industry's suggestion of using trade or 'trivial' names instead of the chemical name was accepted by the commission and came into effect in July 1988. Chemical companies, undercover the real issues of deliberately poisoning People and Nature, while controlling the global business of seed, food and genetic engineering².

¹ For more information on the effect of pesticides on Human health, see: "The Pesticides Handbook. Profiles for Action. Second. Edit. Section 2., p. 145-162.

² The connections between petrochemical and pharmaceutical corporations, the global food system-including the monopoly of seed and genetic engineering- has been the subject of an extensive research. See: Moore & Collins, Food First. Beyond the Myth of Scarcity; Madelev, Human Rights Begin With Breakfast; Bennet & George, The Hunger machine; Institute for Food and Development, Food First. Resource Guide; Rodale Press-The Cornucopia Project, Empty Breadbasket? and Weir & Shapiro, Circle of Poison.

For example, the "Method Validation" of recovering biocides in New Zealand food, demonstrates that meat, fish, eggs, dairy products, fats and oils contain Organochlorines and PCBs such as "Aldrin", "Lindane"(*), "Dieldrin"(*), pp'DDE, pp"-DDT(*), pp'-DDD, PCBs as well as Organophosphorus pesticides such as "Maldison", "Trichlorphon", "Diazinon", "Azinphos-methyl and "Fenitrothion"¹. These biocides have been defined by the Pesticides Action Network International, an organization formed in 1984 in 49 countries, as part of the "Dirty Dozen" that should be banned everywhere in the world².

h) Action: Immediately after the Congress of Environmental Education in Bailadores, I started actions at levels of institutions that train agronomists who - after graduation- they go into training peasants in poisoning agriculture. In 1980 started the demand for information on "organic" courses by some agronomists; they were working in institutions that train agronomists -to train peasants- in polluting agriculture. One of those institutions is the "Foundation to the Service of the Agriculturist" FUSAGRI which -from the

First. Resource Guide; Rodale Press-The Cornucopia Project, Empty Breadbasket? and Weir & Shapiro, Circle of Poison.

¹ Source: Department of Health, The New Zealand Diet: a Survey of Elements, Pesticides, Colours and Preservatives, p. 85 in New Zealand Journal of Technology, 1985, Vol.1. 81-89.

² Source: PAN Asia/Pacific: International Organization of Consumer Unions. Penang, Malaysia.

thirties- was sponsored by the "Shell Oil Corporation", until the nationalization of oil in 1975. I started to have a series of meetings in order to discuss with the sceptical manager-director of FUSAGRI, Dr. Luis Marcano Coello, the arguments on "chemical" versus "organic" agriculture. I also gave him important sources of information on the organic method. One year later, he went to visit the Rodale's Organic Research Center in Pennsylvania, U.S.A., one of the better known organic research centers in the world. Back in Venezuela, Dr. Marcano Coello initiated a national educational programme on organic family gardens for the peasants. He also started a programme of scientific research on organically growing and marketing "amaranth": the sacred plant of the Aztec civilization and the richest source of vegetable protein. Like Dr. Coello, many other Venezuelan agronomist have participated in our ecological courses and have developed a new ecological awareness and consciousness:

When I arrived here, I did not know anything about it. I was trained as an agronomist engineer and only knew about conventional agriculture. 'Organic' sound like craziness to me. When I read Ofelia's book, I thought that there was "something" important there and that I had to see it: I found it. It is here. Is the satisfaction of sharing with others, to be more human, to be myself with no masks¹.

The consciousness of some agronomists participants in our courses was also the incentive for important actions at the "National Institute of Agriculture and

¹ Noris Ibanez, coordinator-member of the responsible team of Caricuao Center, was interviewed by anthropologist, Dra. Maria Matilde Suarez Asuaje, in July 1989.

Livestock", INAGRO: they started a new national programme of literacy for the peasants, centred on organic agriculture.

We started actions on design, planning and implementation of an educational model-center. An important aspect of the organization, was to find a place for our headquarters. It was absolutely necessary to demonstrate the ecological philosophy in practice by starting with totally dead soil. After an extensive search we found what we were looking for: the worst land of all, in Caricuao. This an area 20 minutes from Caracas, characterized by big multi-flats buildings for the working class. The section was a junk-yard under the administration of the Office of the Governor, covered with metal scraps, cement, concrete and stones; the soil was so hard and compacted that even weeds did not grow in it. Our activity to clean the site and to revitalize the soil became intense and people started to come daily and to participate voluntarily. We had planned to open the "Caricuao Center" to the public in July 1980, with an official: "First Course for Instructors on Recycling and Non-Polluting Agriculture", inviting people working in public institutions, specially those holding positions in community or social work. The only requirement, established from the beginning, was that after participating in the programme, the people would commit themselves to giving back to the community the knowledge and skills that they would get in the course. In 1980,

88 participants from 35 institutions graduated from the two "official" full-time courses that I facilitated: the first course in July-August 1980 and the second in November-December 1980. During the course, the participants started the difficult task of revitalizing the dead soil building up the ecological headquarters in Caricuao: a neighbourhood for the working class, 30 minutes from Downtown Caracas.

Our actions on the implementation of a programme on renewable, clean and decentralized energies was possible with the participation of the Ministry of Energy and Mines which cooperated with the development of a "Laboratory on Clean, Renewable Energies" in the Caricuao Recycling Center. The laboratory -for the first time in Venezuela-, started the research and demonstrations of solar, wind and methane energies.

Our actions for "inter-institutional" agreement and cooperation achieved the financial support of industrial recycling companies for the publication of teaching materials and their financial support for the community organizations to implement recycling centers in their neighbourhoods for the classification and sale of inorganic waste materials.

We also worked for film -and other audiovisual- production. I wrote the film-script for the documentary: "Garbage is a Treasure" and Margarita Cardenas started

the research on recycling at industrial levels. She also organized the finance and production of the documentary: "*Garbage is a Treasure*" which was produced in colour, 30 min. 35 mm. by two private film companies, CINESA and "Bolivar Films". The documentary was chosen to open the "Cinema Critic Week" in Radio City, Caracas, in 1981 and it was shown at all TV channels. A 30 minutes promotional film of 18 mm, on the "Center of Recycling and Non-polluting Agriculture" in Caricuao, was also produced in Caracas, in 1981.

Action for Television started when I received an invitation to produce the educational series "Harvest in your Home" by the Office of Adult Education of the Ministry of Education. Ten programmes of 30 min. each, were broadcast daily at prime times at the request of the public, on all the public and private television channels (4) (1981-1982). We also produced a documentary on research, demonstration and training in the "Caricuao Center", for the TV Programme: "Science and the Universe" (25 minutes). Talk shows and interviews on different channels were also broadcast.

Action for the media continued through the educational strategy of "Media as Educational Agents" through a constant publication of many articles in magazines and journals, promoting eco-technologies and eco-agriculture.

We also developed actions for the production of printed material and teaching resources. One of the most difficult tasks was to build up a bibliography in spanish. All sources of information were published in english or french or german. It was urgent to prepare teaching material to be distributed to the participants and to the community on a national scale, through the network of public libraries. Four promotional brochures and manuals on composting, recycling and organic gardening, were produced with the support of the "Venezuelan Association of Secondary Fibres" and the National Institute of Racetracks. The material was distributed -free of charge- through the network of National Public Libraries. Also, in November 1982, my book: *"Garbage is a Treasure. Recycling Culture, Non-Polluting Agriculture, and Other Ways toward an Ecological Society"*¹, was published with the 18 teaching posters² accompanying it. The book and the posters distributed -free of charge-, to the people graduated at the Caricuao Center and to all people in the country wanting to start ecological pilot projects in the community.

The partnership between institution with our programme made possible to start the production of

¹ First Edition: 3.000 Vol. Caracas, 1982- Second edition: 7.000 Vol. Caracas, 1984. Third edition, 3.000. Caracas, 1989. 276 Pages.

² The posters were translated into english in New Zealand, in 1986

teaching materials with the participation of artists from six different institutions who conformed a team for the design of 18 teaching posters; the teaching poster were going to be used by the people graduated in Caricuao, in relationship with the different chapters of the book "Garbage is a Treasure". The posters would be useful for them to start their own eco-educational projects at different levels of the community. The rich diversity of styles and the beautiful art work of the posters, was the result of a participatory team of five artists from four different institutions. The artists also worked as a team for the animation in the filming of the documentary "Garbage is a Treasure".

Also, we organized "Corners for Consultation and teaching resources" through the network of National Public Libraries In order to make all the printed and audio-visual materials available to teachers all over the country. The teaching materials were distributed to each library, and they were provided on loan to the teachers resources such as audiovisuals, books, magazines, posters, course hand-outs and educational brochures. These teaching resources were useful not only to teachers but to community workers, agronomists or to any person involved in community education enabling them to start eco-educational pilot projects in their regions.

Scientific research actions were started by a participant, Dra. Milena Delgado who attended the

November-December 1980 course. She had a scientific background as a specialist in Medicinal Botany at the Faculty of Pharmacy. She started a project never tried in Venezuela before, on the scientific research of Bio-Dynamic preparations, following the laboratory guidelines of Dr. Ehrenfried Pffeifer¹. She invited a friend specialist in Chemistry, Dra. Josefina Bacalao of the Faculty of Chemistry -both women from the Central University of Venezuela-, I gave them the formulas and the instructions², that Dick Falkestein gave me, and they initiated the research on "chromatography on paper" and "sensitive christalography" at the Laboratory of the Faculty of Pharmacy. We wanted to determine the biological quality of plants and vegetables that we were growing in our recycling center with organic methods and compare them with those grown with chemical "fertilizers"²⁵⁹. We also made chromatograms and

¹ See 2.1.1. "Preparation".

² My teacher in Bio- Dynamics, Mr. Dick Falkestein gave me those formulas and indications when I was his student at "Koinonia" Community in Baltimore, Maryland, U.S.A. He wanted that knowledge to be used by the poor people of South America.

²⁵⁹ Which is a non-sense phrase, since the only concept of real soil fertility is Life. As my teacher, Mr. Lee Mac Comb used to say: "The more alive the soil the more fertile it is; hence, feed the soil with organic matter and not the plant". On the contrary: chemical "fertilizers", being highly soluble substances targeted to feed the plant as "fast food", destroy the ecological balance, killing the life in the soil. They are not "fertilizers" at all, but poisons.

crystallographies of inorganic and organic materials such as food, manures and compost. Also, Dra. Milena Delgado started an educational project with the support of the academic authorities of the Faculty of Pharmacy, setting up a policy on classification of all the waste paper produced in the Faculty and selling it to recycling companies.

In the area of "ecological shelter" we also started the applied research of "Architecture with Recycled Materials", at the caricuaao Center, with the participation of Architect Fruto Vivas and a group of students of the Faculty of Architecture of the Central University of Venezuela, (U.C.V.). Fruto designed energy-efficient housing with recycled materials that he named "Trees for Living", with a garden in the roof and covered in edible and useful plants. Pilot-projects started in poor communities in Caracas, involving organizations of neighbours in building their own housing or expanding their schools. This team also built the library and the office at the "Caricuao Center"¹.

We initiated actions for participation in national and international workshops, seminars, conferences, symposiums, forums, and congresses. Since 1979 and until 1982, Margarita, Maritza and I, attended 14 events in

¹ See documentary "Garbage is a Treasure". Colour, 30 min. 1982

The following sequence of pictures "Before" (1979) and "After" (1982), demonstrates the effects on the environment of philosophy when it is realized in practice, through human energy:

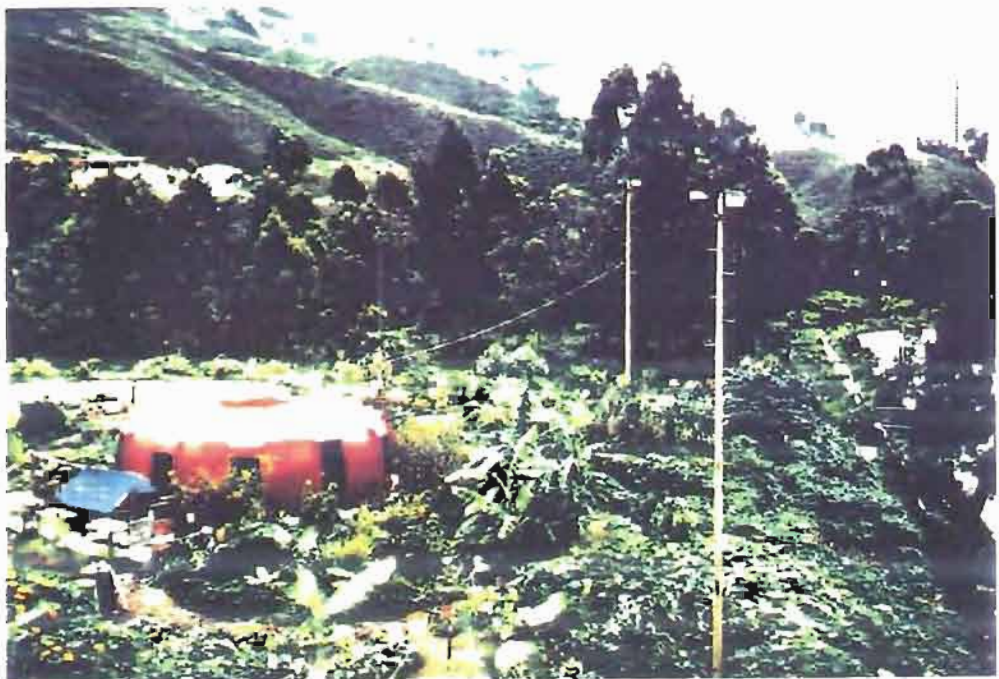
"BEFORE"

(November, 1979)



"AFTER"

(November, 1982)



1979...

Soil erosion

...



1982...

a forest

of more than

50 species

of tropical

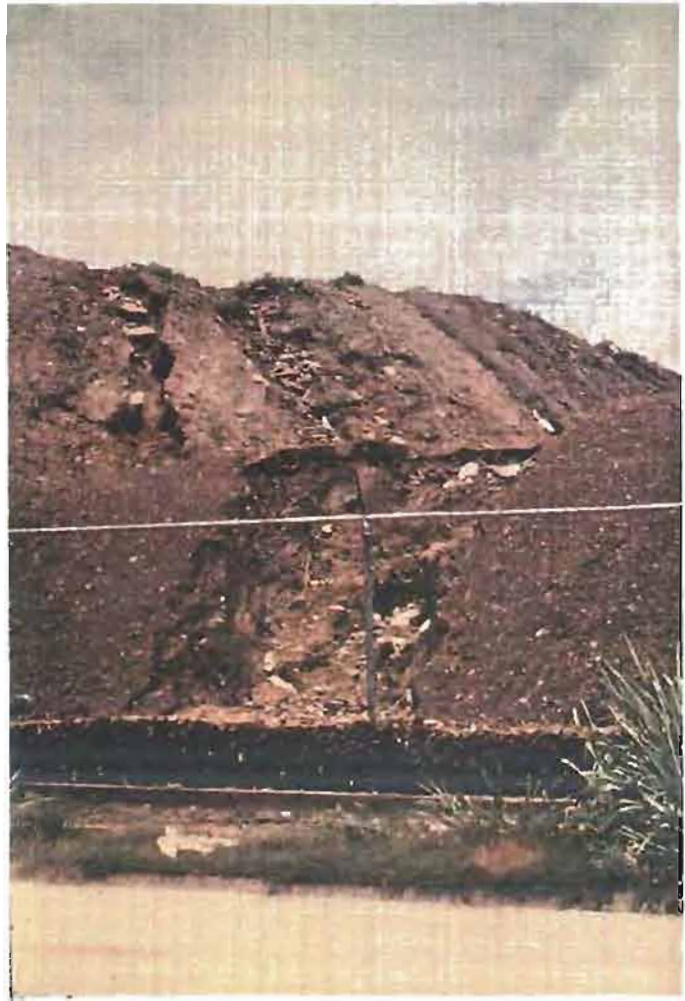
fruit trees

starts to grow

...



1979
starting
from scratch
....



1982...
into a model
center for
Socio-Ecological
Adult Learning
....



In 1979...



In 1982...



Venezuela and overseas as official representatives of the educational programme "Toward an Ecological Society". This strategy permitted us to establish communication, exchange and cooperation between our programme and other similar organizations. Actions also started in public campaigns, practical workshops, public lectures and short courses: these actions permitted the educational work to be expanded beyond the limits of the exclusive, full time and selective courses located at the Caricuao Center. In this ways we were able to reach wider sectors of the population, widening the area of networking for exchange, communication and cooperation.

i) Reaction The "multiplying effect" of the educational process, started to happen in 1981. Immediately the 80 participants finished the two courses, some of them went back to work in their own institutions, starting their own Pilot Projects in the community. Margarita and I invited a team of four people to be responsible for the Caricuao Center: they were going to continue to facilitate future courses and to administrate the headquarters which infra-structure was already completed with classroom, compost toilettes, sheds, library, kitchen and services. We saw the urgent need of rotational leadership and delegation of responsibilities since the people in the team of Caricuao Center had to learn to administrate the center. I understood that I had to leave not only the Caricuao Center but my "official" position, so as others could learn how to be leaders

themselves and how to cope with the political pressures involved with my position. It was important that - eventually-, more people would be able to take over the "official" responsibilities within the inter-institutional context which had become highly complex and demanding. The "core group" of the Caricuao Center needed to develop a strong collective leadership through rotational tasks and to learn how to deal with internal conflict between themselves. I started to work in other areas but the team of Caricuao still invited me to participate in some of their meetings.

Learning demands continued. In two years, 400 or more people received their certificates of attendance to 15 or more days full-time courses taught by the "multiplying agents" or "instructors"; also, the center welcomed about 4.000 visitors through a programme of "educational guided tours" explaining the different ecological areas and zones which were designed with specific learning objectives in mind. After I thought the two courses between 1979 and 1980, different Pilot-Projects in the community started to be organized by the participants in rural and urban areas other than Caracas. The reactions to the educational processes through the media, especially TV, were overwhelming. Hundreds of people started to demand more courses and more information and we had to fulfil that demand. Many journalists (press, radio, TV), were enthusiastic about the wide range of areas of ecological knowledge that

could be explained to the public and some became supportive and encouraging; hence, we had to learn how to deal with the media.

The Programme "Toward an Ecological Society" was centered on adult and community education; however, I started to feel frustrated that nothing had been done for school teachers and school children on a national level. A reaction to our programme was more demands for education; but education of a different nature, outside the formal schooling system. The opportunity to work at this level was possible when -in 1981-, I had to leave my full-time dedication to the Caricuao Center, in order to attend to a very important invitation from the "Foundation for the Children's Museum", to conceive a programme on ecological gardening for children on a national level. I was going to act -as an adviser of the Simon Rodriguez University-, for the design and implementation of the "Ecological Gardens" as a permanent exhibition and to facilitate a course for a team of 6 people, most of them university students. After the course, these participants were going to facilitate educational activities centered on "ecological" gardening for school teachers and children visiting the "Children's Museum" during the week and they were also to guide educational tours through the ecological gardens and permanent exhibits of eco-systems.

Before the official opening it was expected that

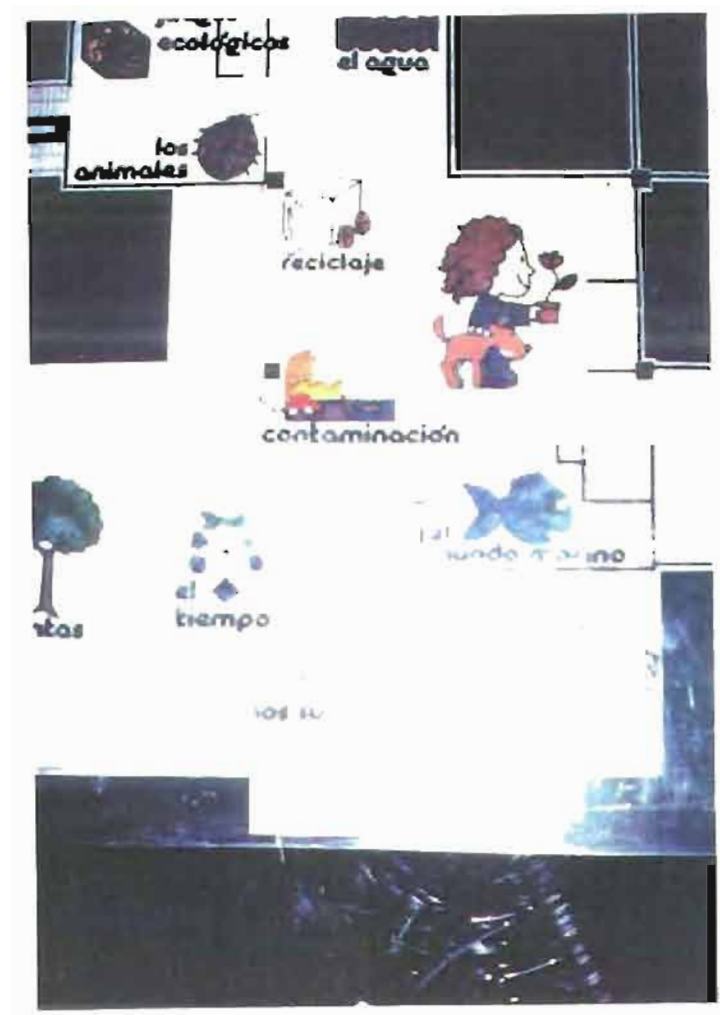
thousands of children from all over the country would visit the museum in the week-ends, accompanied by adults. It was also expected that during the week the museum would receive school-groups of teachers and children, on a regular basis. That meant I had to plan for the needs of learning at two levels. Hence, for the weekend visits, I designed a programme, motivational, recreational and introductory; and for the schools - visiting the museum during the week on a regular basis-, I planned a different programme with activities aiming towards the development of ecological skills, knowledge and creativity. Both programmes -for children and the adults accompanying them-, were aimed to develop new ecological habits, attitudes, values and sensibility towards Nature.

Firstly, I wrote a document specifying the aims, contents and activities of learning and included the description and specific educational objectives of the ecological gardens. I included drawings, detailing the design which was organized in "areas and zones", each one was going to accomplish a particular educational objective. I named these areas as: "The Living Soil", "Garbage is a Treasure", "Composting Corner", "Mr. Frog's corner", "The Seed World", "Dry Garden", "Garden in Containers" and "Practice Zone". The design guidelines were useful, while I was facilitating the course for the "Guides of the Children's Museum"; the guidelines were used by the participants to build up the permanent

An educational design for the Children's Museum in Parque Central (Caracas, 1980-81), was created as permanent exhibition of recycling and ecological gardens in the terrace or "Ecology"

Integrated with other exhibitions:

- "Ecological Games"
- "Water", "Animals"
- "Weather"
- "Sea World"
- "Solar Energy"
- "Soils"
- "Pollution"



Exhibitions open for the children (and their parents and teachers) to explore, to touch, to experiment with, to play with.

Ecological Gardens at the Children's Museum, 1981



With the process of the team of teachers at the Children's Museum, the multiplying effect toward the schools was assured

Pre-School children with a SEAL teacher.

exhibits of the ecological gardens. Our work started from a terrace of concrete surrounded by metal bars, and developed into a beautiful garden rich in Life. The gardens had to be specially attractive to children who were welcomed to freely explore these exhibits and invited to participate in many games special for each area and zone. The practical implementation of the design was coordinated by Ismeya de Marino, the Head of the Department of Ecology of the Children's Museum. The educational potential of the "Children's Museum" in Caracas, -one of the best of its kind in the world-, has been a very important step for the ecological education of hundreds of pre-school and primary teachers contributing to develop a new consciousness and sensibility towards People and Nature in Venezuela.

j) Consequences.

From the "official" view point, the consequences of the second stage of the national programme, could be summarized with the following phrases of an "Evaluation Certificate":

At the end of the third year of the educational programme 'Toward and Ecological Society' on a national scale, one can conclude that the objectives proposed by Lic. Ofelia Suarez on July 11, 1979 have been satisfactorily met. The inter-institutional relations have been strengthened and have become closer over time. As of 1982, forty-five institutions have participated. The educational work in the communities has found a great deal of support and it has spread through the country, with the sponsorship of institutions that have understood the importance of the principles, values, knowledge and humanistic as well as conservationist attitude that this programme entails.

We believe that a profound movement of popular repercussions has been generated." (Office of the

Governor of the Federal District. Caracas, Venezuela, October 1983)

The popularity of the educational programme at different levels of the community was the result of a strong collective internal organization in responsible teams, based on mutual trust and support of each other. This was also the result of a learning process which united many people in the common goal of practising the ecological theory developed by the group, in the everyday actions.

Nevertheless, the pressure from the two institutions sponsoring the programme trying to get a public "environmental image" -for political reasons-, was difficult to overcome. The electoral campaign would start soon and I started to feel the political pressure of the "green" Social Christian party COPEY to use principles for their own image on T.V. programmes and in publications. I resigned my position as a senior lecturer after nine years of uninterrupted work at the "Simon Rodriguez University" and left the country to marry a New Zealander.

A ceremony of farewell was organized and on the 26 of November 1982, the day of the public presentation of my book and posters: "Garbage is a Treasure", no champagne was used to sprinkle them as the conventional Venezuelan custom, but earthy compost was scattered over the printed materials instead. That day was also the day

of the "First National Meeting of Ecological Instructors" and 500 people attended the ceremony, which gathered official representatives of 22 institutions. The main speakers were all women: the Director of Social Development, the Minister for the Development of Women, the Minister of Agriculture, and Margarita Cardenas of the Governor's Office. The ceremony highlighted the main achievements of the Programme "Toward an Ecological Society"¹.

3) Stage 3. Consolidation and Permanence².

This stage starts from the moment of my departure from Venezuela in November 1982 until today, October of 1990. The national educational programme : "Toward an Ecological Society" has continued growing beyond deep economic, political and administrative changes, as a down-to-earth community movement, linked with other similar Latin American and International movements. All the people that participated during these years, have supported, learnt from and shared with each other. In 1990, 8 people are working full-time: from 8 Am to 5 pm, from Monday to Saturdays, at the Caricuao Center. All team members share and rotate responsibilities for

¹ See VHS: "Farewell 1982", produced by the Simon Rodriguez University.

² Data for this stage, has been provided by Dra. Maria Matilde Suarez Asuaje (Anthropologist), who interviewed the responsible team working in the Recycling Center in Caricuao, Caracas, in July 1989.

teaching, administration, research and educational support for the communities. All their decisions are taken by consensus and nobody is more important than the other. Four participants are staff of the Governor's Office of the Federal District and two of the Simon Rodriguez University. A woman works voluntarily, being responsible of the educational projection toward the communities on a national scale, specially incorporating the community of Caricuao; one of the participants is self-funding his own salary, making and selling compost to the visitors. The emphasis of the group is on nationally expanding ecological actions and linking with international networks.

The team is also catering for the growing learning needs of the communities in the provinces, attending the high demand for courses and workshops. The core group of the Center in Caricuao are constantly travelling in order to attend by invitation meetings with organizations of peasants, schools and many other community groups and institutions. For example, while one of them is teaching a two-week course in organic methods for the community in San Felipe, Yaracuy State, another is coordinating a recycling programme for the Municipal Institute of Urban Waste I.M.A.U. in Maracaibo, Zulia State; an while one of them is travelling to diagnose the development of organic agriculture in the western states of Venezuela the others are discussing organic methods with cooperatives of peasants or travelling to attend

different congresses, seminars and symposiums¹. The team is working to establish self-funding initiatives at the Caricuao Center. These include selling compost, printed material and marketing healthy snacks made with solar-dehydrated tropical fruits. The courses and workshops, which were fully sponsored until 1983, now require that the participants contribute to the costs of printed and photocopied materials. The Caricuao Center is offering many different practical workshops centred on projects such as making solar heaters, solar or methane gas stoves. Another scheme is a recreational programme with children on holiday gardening, which has been successful for the last three years.

The Simon Rodriguez University have academically recognized the full-time courses taught at the caricuao center (15 days, Monday to Friday, full-time, from 8 am to 5 pm), by granting three units academic accreditation for students completing these courses which assessment includes: self, team and project evaluation. These courses are considered as an "optional" paper for any student of any career. Participants at the Caricuao Center have also expanded the land towards the terraces

¹In August 1982, I was the only person from Latin America at the Conference of the International Federation of Organic Agriculture Movements in Boston, U.S.A. In October 1989, a team of four Venezuelan representatives of the programme "Toward an Ecological Society", participated in the First Latin America Regional Conference of the IFOAM. This giant political step against the global food system controlled by petrochemical corporations, involved the participation of all the countries of Central and South America.

on the mountain behind the center. Neighbours are now growing food in a community garden and organizing themselves for collective food preservation and storage. These are the first steps for the creation of "seeds banks", "seed exchanges" and "food cooperatives". Eco-educational Pilot-Projects in the community have been multiplying all around the country. In Barquisimeto and Sanare in Lara State, many cooperatives of peasants are in transition to organic agriculture; the participants that for many years were "officially" trained to use chemical poisons, are rejecting the "technological packages" introduced by the National Foundation of Agronomic Research. The peasants have presented their arguments to the authorities: those technologies have created economic dependence, health problems, risks for human life and pollution of the environment. The cooperatives of peasants are now growing crops organically in special areas of land and are teaching themselves self-reliance and sustainability. In other areas, many people have offered themselves to work voluntarily as "multiplying agents" and are expanding the educational effect in the communities, specially in the central and occidental states: Zulia, Tachira, Merida, Lara and Trujillo States. As a participant working in the "Caricuao Center" said:

"Do you want me to be really sincere? I think that our major achievement here has been that the programme did not collapse and that we survived the political changes of different administrations. We have had terrible moments of external pressure with each administrative change from one political party to another. But this programme is solid, is like a giant and is consolidated. Nobody, absolutely nobody, can destroy

it."¹

The consolidation and permanence of the educational programme in Venezuela is based on the multiplication of participants through different courses and workshops.

I have calculated that from 1978, when I started the extension course in Canoabo until November 1982 -the year I came to New Zealand-, about 200 people participated in the courses I facilitated. Since 1982, approximately 300 participants a year have participated in full time courses or workshops at the Caricuaao Centre. That means, that near 2.700 people have been involved without counting the thousands of visitors that go for occasional workshops and educational guided visits.

¹ Interview to Doris Ibanez of the Caricuaao's Center by Dra. Maria Matilde Asuaje in July-August 1989.

III. CRITICAL ANALYSIS OF CASE STUDY 1

VENEZUELA (1973-1990)

The first case-study in Venezuela, looked at the conditions in which a process of adult education took place within non-formal modalities of adult learning. It also related the educational process to the dynamic changes that occurred within the economic and political hierarchical context of the country. The narrative style served to described "what happened", and the format adopted, allowed to distribute the information in a methodical sequence of: "Context, Background, Preparation, Organization, Action, Reaction and Consequences"¹. The sequence of events that linked the educational process with the local reality, was also organized in three categories of time and space named "Stages". Following is a summary of partial conclusion on Case Study 1.

1) Analysis of First Stage (August 1977- May 1979)

The three experiences in adult education in Canoabo :the extension course on "12 methods of Non-Polluting Agriculture"; the community project "Garbage is a Treasure" and the artistic performance of the community: "The Giles are Having a Party", demonstrates that eco-learning could be a powerful tool for social change on a

¹ Bondurant, Conquest of Violence, p. 45-46

community level. The project "Garbage is a Treasure" was based in the collective participation of 36 people of the most diverse backgrounds. It attracted 20 participants who were students of the three careers of the university in Canoabo, all of which related with the Venezuelan rural environment; it also attracted 2 primary school teachers, 2 peasants, 2 university lecturers and 10 people from distant cities. The group raised a critique of two main social problems: the "Waste Culture" and "Agrochemical Food Dependence". The community project "There is a Treasure in Garbage" challenged the "waste culture" introduced in the valley by the "consumer's society" and challenged the poisonous "chemical agriculture" introduced to the peasants of Canoabo; the educational project also challenged the patriarchal, male dominated hierarchy of agronomists, and their "developing" philosophy of adult training programmes. Nevertheless, at that time I did not have a conscious feminist position of challenging patriarchy and I used sexist language -like everybody else-. Nor did I have a background of feminist theory or a conscious theory of hierarchy to rationally interpret and to challenge the patriarchal nature of the institution for which I was working:

Hierarchy, which first rears its head tentatively with gerontocracies, did not suddenly explode into prehistory. It expanded its place slowly, cautiously, and often unnoticeably, by an almost metabolic form of growth when "big men" began to dominate 'small men'...¹

¹ Bookchin, Remaking Society, p.57

My "feminist" position was guided rather by intuition than by my own conscious will. Thanks to the Venezuelan political culture of "personalism" and "particularism" for protection and trust, I could act at the edge of the male academic hierarchy of "small men" in Canoabo, which made possible to introduce eco-learning not only to university students, but to peasants, teachers and other university lecturers.

Now I understand that my relative freedom of action and independence was only possible by the authority of the Rector: the "big man", over the "small men" of the Rectorial Council and the male academic staff below him. I was "an outsider, a "deviant". Under patriarchal protection, I was also "permitted" "to teach" university students non-polluting methods of agriculture in opposition to the official "chemical" polluting agriculture although the "status quo" considered my actions as "eccentric".

Lack of resources or budget did not impede the participants in the community project "Garbage is a Treasure" to develop it as a popular and enthusiastic local movement. On the contrary, it was important to discover that -without a budget- I did not have to compromise the possibility of freedom to work outside the formal system of accreditation, to use the natural environment as a "classroom" and to develop actions toward change on a community level while fulfilling the

formal, academic and administrative requirements of the institution.

The Canoabo experience provided the basis for developing a method of adult learning (See Chapter 4) that contributed to raise a level of ecological awareness of the participants about the hierarchical roots of society based on the exploitation of People and Nature; their initial level of consciousness was reflected in their needs to act with responsibility in the practice as individuals and as a group, trying to partially halt environmental destruction on a local scale. On a personal level, I also understood -maybe too late-, that becoming a public person, the risks of my work being used as a political image for the biased propaganda of the two main parties, increased. In Venezuela, to be "politically neutral" is a disadvantage, since all the system of public administration only support those who "belongs to the party", actually in government. After the experience with the Social-Democrats I had to be prepared to deal with that eventuality again in the future with the Social-Christians.

2) Analysis of Second Stage (May 1979-November 1982)

The pioneer group tried to expand the educational processes very fast, at all levels of the community and in a very methodical and consistent way. We tried to set up basic infra-structure and to involve as many people as

possible: we approached individuals and groups with as many backgrounds and diverse ideologies as possible, and as soon as possible. Personally, I knew that I had only a short time to work relatively free of political pressure before the beginning of the next electoral campaign and decided to leave Venezuela before it happened. But this time -to make my position clear-my withdrawal from the programme on a national scale would be made public.

At that time, the core group with Margarita Cardenas at the Office of the Governor of the Federal District, and Maritza Barrios at the Prefecture of the Libertador Department, had the strength to influence policy making. Although from my position at the university I did not have the intention, the strength, nor the will to propose an ecological political movement by itself. The conditions were not ready. I realized that -once the movement started- it would be as a strong wave for change; I had to leave and let others grow by themselves as major leaders, expanding the educational work and action toward the community as a popular movement.

I also realized that we did not openly challenge the hierarchical roots of the Venezuelan society, since the official style was of "participation" and "cooperation", although not of "confrontation". The tendency of the "official" attempt of the programme followed the guidelines of the "Recycling Culture" which

proposed recycling at community levels with simple technologies based on the cooperative actions community-enterprise for the classification of waste materials to be sold to recycling companies on an industrial scale. Nevertheless, the Venezuelan programme did not challenge strongly enough the hierarchical nature of those recycling companies -which besides, were also polluting the environment-, nor the exploitative system of consumers which -in the first place- produced the "waste" to be recycled.

Nor did the Venezuelan programme challenged strongly enough the global food system controlled by an elite which is one of the most dangerous aspects of dependency we are facing today.

The monopoly of the "food-chain" from the seed to the table has already been completed by a handful of Transnational Corporations; they control the multi billion dollars agri-business and the total food chain on planet earth:

By cornering the global seed market, the companies apparently want to insure that farmers the world over are dependent on their seeds, as well as their fertilizers and pesticides¹

Few petrochemical corporations, which have been producing poisons for more than sixty years, have been fast in taking over hundreds of family seed businesses, and the breeding programmes and related research which

¹ Weir and Schapiro, Opus cit., p. 44

were sponsored by the national governments. Twenty three petrochemical corporations bought forty six traditional seed companies in only few years. These corporations are buying the main seed companies as soon as possible¹, in order to finalize the total monopoly of the global food system: "We are losing the diversity of traditional crops, too, as modern agriculture spreads vis monoculture of engineered Green Revolution strains-..."². Few Multinational Corporations own the germplasm and have the exclusive monopoly of the main food crops consumed in the world. Through the International Plant Variety Rights Legislation, which gives exclusive rights to companies on genetically manipulated plants, they are substituting the old traditional varieties and plundering the genetic heritage of the Third World. Nor did the Venezuelan programme challenged enough the creation of Norman Bourlaug, "the Father of the "Green Revolution"³ which was introduced in Venezuela in the fourties through formal and informal systems of "adult education". The "green revolution" was sponsored by multinational business of agro-chemicals and officially approved. The

¹ Such as Ciba-Geigy, Monsanto, NAPB (Olin/&Royal Duth/Shell), Pfizer, Sandoz, FMC and Union Carbide.

See : "Table Five. Recent North American Seed Company Acquisitions", which relates seed companies with their new owners: Weir & Schapiro, The Circle of Poison. Pesticides and People in a Hungry World, p. 86

² Barnaby Edit., The Gaia Peace Atlas, p. 171.

³ The Gaia Atlas of Planet Management, p. 61

"Green Revolution was the "necessary devil" selling "technological packages" of chemical fertilizers, biocides, irrigation systems and monocropping techniques to the peasants for the perpetuation of the hierarchical food system as:

...the development and widespread adoption of high yielding strains of wheat, corn, and rice in the Third World. The term has been used to describe the increase in agricultural production in India in the 1960s and 1970s, particularly in Punjab. Recently, 'Green Revolution' has become popularized and now refers to almost any package of modern agricultural technologies introduced in the Third World¹.

Through the "Green Revolution", systematic poisoning of People and Nature by petrochemical corporations has been not only officially approved by the governments, but commonly accepted by People without opposition. The acceptance by the communities of the official chemical agriculture is common not only in Third World countries, but in countries considered "developed" such as New Zealand and Australia. The conformism and passiveness of adults being systematically poisoned by the global synthetic agricultural system is institutionally manipulated through the invisibility of the hazardous effects of the products:

To escape from legislation banning the production of certain toxic substances in the West, chemical companies have hit on a scheme as ingenuous as it is simple: they manufacture the different ingredients of a banned product at home and then ship them to the Third World-where they are combined in so-called 'formulating plants'. From there, the products can often be re-exported anywhere else without encountering any

¹ The Hunger Project, Ending Hunger, p.409.

impediment.¹

Effectively, there are no "impediments" at levels of legislation, administration or adult education, specially in Third World countries to stop the production, selling and distribution of poisons; at "scientific" levels individuals, groups or institutions are claiming that there is "lack of evidence" and "not enough" scientific research on the poisoning and destructive effect on People and Nature by agro-chemicals. I have witnessed the systematic violence against People and Nature in Venezuela and I will argue that the "biocides" issue must be related to other processes of global environmental destruction. At the edge of global extinction, we are witnessing the process of dissolution of the nation-state, the "merging" of "blocks" of power and the political taking-over by TNC:

The nature of large corporations is profoundly inhuman. Competition, coercion, and exploitation are essential aspects of their activities, all motivated by the desire for indefinite expansion. Continuing growth is built into the corporate structure.²

¹ Non Governmental Organization NGO: The Global Pesticides Market, p. 4. in "What's Cooking?".

² Capra, Opus cit., p. 233

And "continuing growth" is considered the aim of "development" for the "Less Developed Countries"(LDC) of the First World to reach -one mythical day-, the levels of "Development" of the First World. This myth is sustained by international programmes of "cooperation for development" and the permanent trend of the First World to help the "poor" Third World.

In Chapter III, in the critical analysis of "Environmentalism" -as an expression of reformist thought-, I will argue that the passiveness of people in the "Third World" who are being poisoned by agro-chemicals and their acceptance of pollution and/or destruction of their natural and human-made environments by their own national governments and by Multinational Corporations, is being fostered through some international programmes of "Adult Environmental Education" contributing to the invisibility of the hierarchical roots of social and ecological chaos.

3) Analysis of the Third Stage (Nov. 1982-1990)

The consequences of the Second Stage of Case Study 1 (1979-1982), were established the foundation for a third stage of stability and permanence. This must be seen from two perspectives: the changes in policy making that occurred within some key public institutions sponsoring the programme "Toward an Ecological Society"

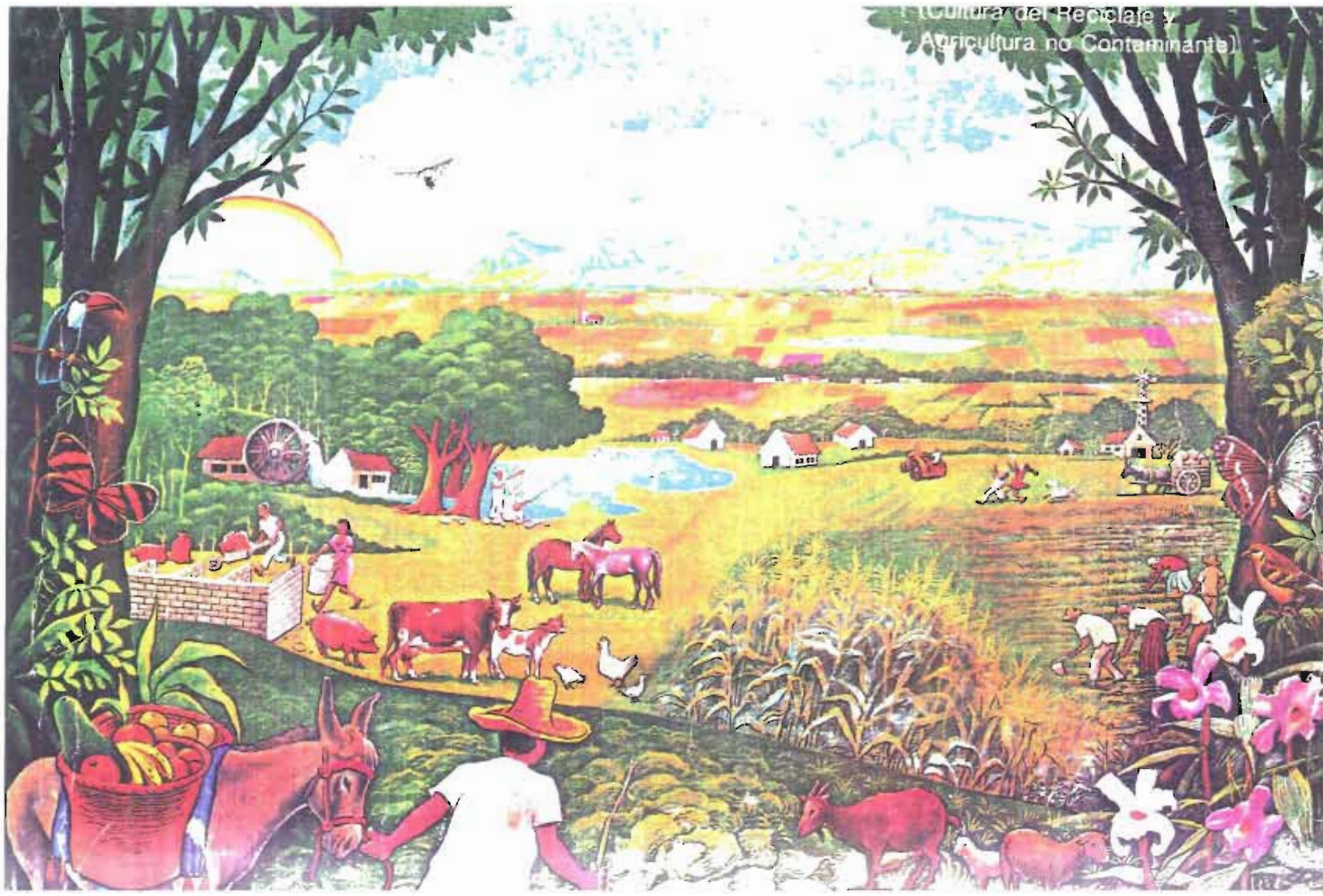
on a national scale and the changes that have happened spontaneously in the community, outside the state-institutional umbrellas. While the new administration of the Governor's Office has tried to modify the nature of the courses at the Caricuao Center, the team has consistently opposed any intention from the authorities to change the original programme; also with the political pressure, the "Caricuao Centre" started to receive less funding since the economic depression in 1983. In 1990, the Caricuao Center is named *Foundation for the Development of Ecological Agriculture and Alternative Energies, FUNDAGREA*. as a non-governmental, self-funded organization.

The responsible teams in the headquarters of Caricuao and in the Children's Museum, as many others who started their own Pilot Projects in different states, have continued their eco-educational work in the practice, but it seems the struggle is dispersed and related to local communities.

That the state permitted the programme to grow on a national scale to the point that it is now a "uncontrollable" transformational force, was only possible through the involvement of individuals by the thousands coming from all around the country. At this stage, it is necessary not only to re-organize headquarters in the "Caricuao Centre" on new self-reliant basis, but also to develop effective actions

toward change in the 1990's. It is necessary to politically integrate the spontaneous efforts of the different individuals and organizations that have grown in a dispersed and isolated way -specially in the central and occidental regions-, since 1982. In the actual decade ecological adult learning will challenge the many roots of hierarchy and any form of exploitation, dominance or destruction of Nature and People in Venezuela.

(Cultura del Reciclaje y
Agricultura no Contaminante)



CHAPTER II

CASE STUDY 2: ECOLOGICAL ADULT LEARNING

NEW ZEALAND (1982-1990)

The following case-study covers eight years of action and struggles of Ecological Adult Learning in New Zealand, analyzed within the political context of the Fourth Labour Government towards a society ruled by international free-market forces. The case study covers the years between 1982 and 1990, and its analysis will focus on the tensions and conflicts aroused by the "new" policies on education, employment and environment. In the reality, the whole country was being affected by the global re-emergence of the neo-liberal "NR" (NR), a non-official international political force which manipulates political parties of the nation-states in government and in opposition. The major aim of the NR is a society ruled under the system of anarchist capitalism. To achieve this aim the NR ideologists must influence at high levels of policy-making and implementation and take strategic positions at all levels of government administration. They are moved by the "profit motive" towards an ideal free-market society: for its attainment the power of the state must be minimized and the state property, privatized.

In 1988-1989, as student of the University of Canterbury I wrote two essays on the NR. For EDUC 606 Human Development: "The Global Supermarket" and "Nature for Sale". For EDUC 646 Continuing Education, I wrote: "Theoretical Framework of the NR and its Possible Implications for Adult or Continuing Education". In this essay I identified NR thought in the document and the discussions of the policy known as "Learning for Life". The three essays are unpublished.

In the following presentation of the case study of Ecological Adult Learning in New Zealand, I have chosen some basic NR arguments that were included in the above works although they have been re-interpreted and modified, according to new data. Hence, it is important to clarify that this thesis is mainly concerned with the multi-national corporate trends of the global financial NR ruled by an elite which economic basis must be searched within the mechanisms of international property and the International Division of Labour IDL.

I. CONTEXT:

1) "Aotearoa: Land of the Long White Cloud" Becomes "New Zealand: Land of Nostalgia"¹

The following case-study is located within the ecological niche of Aotearoa-New Zealand -unique and fragile- which has suffered long term stress due to human impact, some of its ecosystems being totally destroyed to the point of extinction:

It is seen in the destruction of vast amounts of forests; the near elimination of certain forest types; and the extinction of around 30 bird species and an unknown number of other vertebrates and invertebrates through hunting, predation, introduction of predators, and destruction of habitat².

Aotearoa-New Zealand, is located in the South Pacific at the edge of a continental plate: south east of Australia, north of the Antarctic Territory and south west of South America: "... extending for more than 1.500 kmts from north to south..."³, is a territory of 268, 000 sq. kmts², divided in two main islands and other islands⁴. The land in the North Island is still forming

¹ Based on the theory of "nostalgia" developed by some authors such as Parsons, J. "This Precious Land", 1982; Spoonley, P., "The Politics of Nostalgia", 1987.

² Mcglone, The Polynesian Settlement of New Zealand in Relation to Environmental and Biotic Changes, p. 125 In: Supplement to New Zealand Journal of Ecology Volume 12, 1989.
Published by the New Zealand Ecological Society.

³ Davidson, J., The Polynesian Foundation, In: The Oxford History of New Zealand, p.6.

⁴ Department of Statistics, New Zealand 1990.

from the erupting lava flowing upwards from the bottom of the ocean and is constantly being pushed up and away from the west side by the Tasman continental platform. The activity of the young northern land is seen in the boiling mud, hot springs, shakes and tremors. The oldness of the south land is reflected in the solid sharpness of high mountains, the deepness of fiords and the passivity of dead volcanos. The diversity of Nature is also seen in 20 different types of soils groups¹ distributed in the north, central and south regions:

There is considerable regional variation, from the subtropical north to the cold uplands of the alpine region, the semi-arid basins of Central Otago, and the very wet mountains and lowlands of the South Islands West Coast. Fifteen climatic districts are recognised².

The "regional variation" is characterized by the richness of its native Life which can be found in three major botanical provinces and three marine provinces³. From low coastal lines, plant Life appears with its minute marine microalgae floating side by side with big brown "rimurapas" or "bull kelp" (*Durvillaea antarctica*)⁴. Dense growth of "...525 species of mosses, 500 hepatic liverworts and 15 hornworts..." and lichens, cover rocks and tree trunks, serving as the living

¹ Gibbs, New Zealand Soils, an Introduction, p.27

² Davidson, J., The Prehistory of New Zealand, p. 30

³ Ibid., p. 31

⁴ Brooker & Cambie & Cooper, Economic Native Plants of New Zealand, p. 67

foundation for other plants to germinate and grow¹. Whereas the edges of swamps are surrounded by mangroves, the edges of the dunes are protected with tussock grass (*Poa caespitosa*), pingao (*Desmoschoenus spiralis*) and sea rush (*Cyperus Ustulatus*)². From low hills and valleys into high alpine regions, there is still more abundance of diverse native flora. The succession of vegetation varies from ground covers, grasses, ferns and flaxes continuing with understorey and canopy trees, all growing tightly together. The climax vegetation is seen in the giant "kauris" (*Aghatis australis*), "rimus" (*D. cupressinum*), "totaras" (*P. totara*) and "miros" (*Podocarpus ferruginous*)³. In these forests, Life without humans found in New Zealand a unusual expression of peace : the "bush" was populated by flightless birds that did not need to scape from predators, and by other animals that did not need poisons to defend themselves.

Nevertheless, Life with humans found in New Zealand an unusual expression of conflict that must be analyzed within the cultural relationships between People and Nature and the social relations between the People. The first polynesians arrived about AD 1600 and with them tropical agriculture, since Maori people brought with

¹ Ibid, p. 83

² Ibid, p.36

³ Sources: Brooker & Cambie & Cooper, Economic Native Plants of New Zealand, p. 35, 94; and: Department of Land and Survey, New Zealand Native Plants in Design, 1983.

them plants which had originated in warmer climates and tried to cultivate them.

Whereas breadfruit, coconut and pandanus could not survive in New Zealand conditions, "ti pore" (*Cordyline terminalis*)¹, "kumara" (sweet potato), taro, yams, paper mulberry and gourds grew well in their gardens². Maori agriculture evolved through different variations known as: (a) "swamp cultivation" which involved channel digging, drains and ditches; (b) stone-walls gardens, rows heaps and terraces parallel to the beaches and along rivers banks; (c) slope cultivation which involved the cutting of large trees for building food storage pits and "slash and burn" cultivation³:

Much of the country was covered in forest before the arrival of humans. Significant areas had been deforested by the late eighteenth century. A number of species of bird had become extinct and others were severely restricted in distribution. In some areas erosion had increased, sometimes with marked effects on coastal environments.⁴

Also Maori people brought a culture of hunting and fishing and predators such as dogs, pigs and rats as well as inter-tribal war. Sometimes the people had to shift to other places after degrading the soils, destroying the

¹ Leach, H., 1000 Years of Gardening In New Zealand, p. 56

² See Leach, H., Opus cit., p. 53; see also Davidson, J., Opus cit., p. 116.

³ Data from: Leach, 1000 Years of Gardening in New Zealand, p. 50, 52 and 63; also Best, Maori Agriculture, p. 9.142-143

⁴ Davidson, The Polynesian Foundation p.38

forests and hunting all the birds¹.

In their struggle for survival, the Maori people started to develop a spiritual relationship of interdependence with Nature. Their knowledge and wisdom grew as they became aware of the cycles of life of plants and animals. These wisdom developed into an advanced culture of regulated seasonal food gathering and food production in harmony with the climatic changes occurring during twelve months². According to the Maori division of time each month was divided into 29 to 30 nights and each night was given a particular name "...after certain stars"³ spiritually linked with all manifestation of Life⁴. Maori people also developed a deep knowledge on how to use the native plants and animals for food, medicine, fibre, building, dyes, fishing gear and tools. Beauty, symbolism and art also grew as expressions of the spiritual identification of the Maori people with the natural world of Aotearoa. For example, some Maori proverbs provides an insight of the intimate identification of people with Nature: feelings are related to weather, beauty of a woman is compared with a

¹ As it was the case of the people living in Palliser Bay. See: Leach, *Opus cit.*, p. 63; Davidson, The Polynesian Foundation, p. 10.

² Best, Maori Agriculture, p. 216

³ Best, The Astrological Knowledge of the Maori, p. 48

⁴ Best, Maori Religion and Mythology, p.58

morning star and grief with the waves of the sea¹.

Maori mythology and religion established a system of belief in a universal order created by Io, a Supreme Being² according to which Life is formed through the breath of Life³, the waters of Life⁴ and Light⁵. In the beginning, "...from chaos or nothingness..."⁶ appear Rangi (Sky Parent) and Papa (Earth Mother), and from their offspring, Hine, a breathing woman was formed from the earth. From her spirit breathed into her nostrils by Tane (the guardian of the forest), humans were born. Spiritual forces "Poutiriao" were appointed by Io as universal "guardians" in order to care for any manifestation of Life and to regulate and protect Nature. Hence, death, heavens, oceans, weather, diseases, seasons, violence, occult knowledge, peace, prosperity and fertility, all have their particular protectors⁷. In the universal order of the Maori, the spirits of the ancestors protects the material world where humans, animals, plants and minerals are all interrelated.

¹ Brougham & Reed, Maori Proverbs, p. 4, 5, and 45

² Best, Maori religion and Mythology, p. 99

³ Best, Maori Religion and Mythology, p. 59

⁴ Ibid, p. 96

⁵ Ibid, p. 89

⁶ Best, Opus cit., p. 57

⁷ Best, Opus cit., p. 106-109

Although the Maori people changed the natural environment during the long process that took for them to learn how to survive in New Zealand, their destructive effect was minimal if it is compared with the effect of the pakeha-european culture¹. At the end of last century it was evident...

...the results of three decades of rural exploitation: the depletion of native pastures by over-stocking, fire, and erosion; the spread of noxious weeds; the unchecked depredation of rabbits².

Effectively; the main roots of ecological imbalances evident today, originated in the colonial past from the late eighteen century with the coming in 1769 of James Cook³. After years of confrontation between the European and the Maori people, British sovereignty was established over New Zealand in 1840 in the document known as "Te Tiriti o Waitangi" or the "Treaty of Waitangi"⁴. The Treaty was signed that year by some Maori chiefs in the belief that -according to the second article-, they would retain their "tino rangatiratanga"

¹ Parsons, This Precious land, p. 4

² Gardner, A Colonial Economy, p. 79 In: The Oxford History of New Zealand, 1981

³ Owens, J. Chapter 2. New Zealand before Annexation, In: The Oxford History of New Zealand, p. 29

⁴ Sorrenson, M., Maori and Pakeha, In: The Oxford History of New Zealand, p. 169

Note: The Treaty of Waitangi was signed thirty years after Venezuela proclaimed the "War to Death" to the Spanish empire and ten years after Venezuela proclaimed its total independence and its sovereignty as a republic.

or their chieftainship over their land and lives. The first article of the Treaty also gives the Queen "writ to run throughout the land" which -in the practice-, was submitted to English law¹. Since then, it started a long time struggle of the Maori people, the "Tangata Whenua" or "People of the Land":

The rivalry that developed between the races was more than a naked contest for land, important though this was. It was also a contest for authority, for mana, for authority over the land and the men and women it sustained. Above all, there was the question of whose authority, whose law was going to prevail².

The arrivals and departures of white whalers, sealers and traders announced a new era of imperial discovery of richness in a wild territory, although for exporting the raw products of the "new" land to Europe it was necessary to colonize. In the nineteen century the state provided the resources for the white colonizers to settle and with them, it also arrived a particular "nostalgia" for the natural landscape of their "mother country". New Zealand Nature was considered a wild "waste land" which had to be conquered by the "civilized" and "nostalgic" white:

We now know how much the nostalgia of the early settlers has cost us, how disastrously they upset the balance of Nature in New Zealand with their gorse, sweet briar, rabbits, goats, opossums and many others...³

Today, the same "nostalgia" is seen in the straight lines cutting the beautiful rounded curves of the natural

¹ Ibid, p. 176

² Sorrenson, M., Maori and Pakeha, In: The Oxford History of New Zealand, p. 176

³ Parson, This Precious Land, p.4

landscape of mountains, soft hills, valleys and coasts which have been deformed by the "square mind" of specialists in land division and subdivision. The farming landscape is a succession of rectangles and squares delineated by straight (and inefficient) wind breaks and fences, containing still more straight rows of vegetables or fruit trees, planted in flat monoculture. The straight fence lines and rows were not only imposed by the mechanized agricultural system of the "pakeha": those squares subdivisions of the New Zealand land were established by them for their system of private property of "...selling and settlement of Crown land..."¹ which made legal the commercialization of Nature measured by the acre.

The anti-natural mind of the "pakeha" legislators have also had many other negative influences on the natural environment. For example: the legislation of Venezuela and New Zealand express different conceptual frameworks about Nature and Society. In Venezuela, the environmental legislation establishes the conceptual integration of soils, waters and forests as an indissoluble unity². The ridges of all the mountains are declared "protected zones" because the law considers them as an eco-system of critical importance related with the

¹ Gardner, Opus cit., p. 74

² The Congress of the Republic of Venezuela, Forestry Law of Soils and Waters, Chapter II, Article 17, p. 7. Caracas, Venezuela, 1975.

total cycle of water of the nation. Hence, all the mountain and hill ridges -even if they are within private property-, belong to the nation and they must be planted in order to have a vegetative cover that extend 300 mts. from each side of the ridges and hill slopes. On the contrary, the legislation in New Zealand has conceptually separated the soils from the water and these from the forests. Hence, all over the country, hundreds of hectares of monotonous paddocks can be seen containing millions of sheep, goats, deer and cattle. Whereas the fences keep them away from the roads, they let the animals to run free up to the high levels to constantly overgraze hill sides and mountain ridges. Extensive native forests have been cut down for exporting wood chips while millions of exotic pine trees that make the soil acidic and are prone to fire, have been planted by the state. The pine trees are now for sale to private companies which are allowed to cut down the artificially-made forests letting the already dead soil without vegetative cover:

...the destruction of forest in private land is a major conservation concern. Logging for woodchips and for sawlogs and forest clearance for exotic forestry and agriculture result in the destruction of 2000 hectares of forest each year¹.

In South Island "...the destruction of forests" is visually evident since from north to south the island could be divided into two distinctive halves; whereas the east side of South Island is dry, barren, deformed by

¹ Environment and Conservation Organizations of New Zealand ECO, Newsletter May/June 1990, p. 2

deep soil erosion and of a pale beige colour, the other half or "West Coast" is humid, cold and almost totally covered with large dark green forests. This dichotomy of colour indicates the imbalance of the cycle of water heading towards catastrophe; and while flood, draught and water scarcity hits South Island due to forest destruction, the use of agricultural chemicals is polluting the underground water. Lethal biocides that have been banned in other "First World" countries are being manufactured and used here, and polluting industries are allowed to dump their toxic wastes in rivers and the sea. The result is that... "For the first time..." farmers in the Canterbury region:

...are facing irrigation restrictions for the whole area. It is not easy telling farmers to risk production losses by turning up the tap that feeds their crops, even though the alternative could be a shortage of drinking water for them and their neighbours¹.

These farmers who continue practising pastoral agriculture and chemical horticulture are the descendants of "nostalgic" pakeha-european, for whom..."London was still the centre of the world..."².

These white people soon revealed the needs to preserve their "superior and civilized" white race of the pioneers³. Hence, after 1840, the initial trends of

¹ Keen, Suzane, Water restrictions worry farmers", p.25. In, "The Press"; Christchurch, September 22, 1990.

² Gibbons, P., The Climate of Opinion, In: The Oxford History of New Zealand, p. 329

³ Ibid., p. 328

"Pakeha-Maori" sexual interaction and inter-marriage declined, since... "The coming of the colonial women, wether as wives or servant girls soon destined for husbands, put a damper on liaisons and marriage with Maori women"¹. The result of the colonial "damper" is that New Zealand today -as studied by The Royal Commission on Social Policy-, reveals a society divided into "white" and "brown" people. This bi-colour society is also bi-cultural, although "integrated" on the bases of the "...frustration and cultural alienation..."² of the Maori people on all areas a social life including education, employment, health and housing.

On the one hand, there is a 150 years old frustration of the Maori people claiming for their rights on the land and fisheries and the rights to preserve their language, their culture and to decide on their lives by themselves. On the other hand, there is also the frustration of many white New Zealanders who do not have any intention to learn Maori language or be flexible towards Maori culture. There are some who do not favour the "Treaty of Waitangi" as the basis for their "white" society and because of it "...there should be no special treatment for the Maori"³. In New Zealand the most extremist "nostalgia" claims for a "white" society as the

¹ Sorrenson, M., Opus cit., p. 170

² The Royal Commission on Social Policy. The April Report, 1988. Volume I. New Zealand Today. , p. 262-276

³ Ibid., p. 328

aspiration of many racist groups of the extreme right, which "...marginality may not continue indefinitely, specially if the NR in its various manifestations gains in importance."¹. Effectively, acknowledging its importance, the thesis continues presenting an insight of the New Zealand NR within the global context.

a) New Zealand and the New Right New Zealand, by the 31 march 1989, had 3. 359. 0 million people mainly concentrated in North Island: 81.2 % European, 9.0 Maori and the rest of other ethnic groups². However, with advantages such as a small population, plenty of space and a rich natural environment, the country is far from being a model of social harmony and pacific life. In few years, a particular trend of the neo-liberal NR which power is based on the global corporate economy-, has achieved to diminish the power of the welfare state, to privatize New Zealand public property and to establish - on the basis of the actual society-, a new global society of unemployed masses as well as masses of computerized enslaved consumers under the rule of an internationally rich elite, moved by greed and the profit motive³.

¹ Spoonley, P. The Politics of Nostalgia, p. 266

² Department of Statistics, Opus cit., 1990

³ See Chapter Three. 2.2.1: Ideology of the New Right

At this point, a differentiation must be established between this trend of the "financial New Right" which is involved with global-internationalized markets, and the New Zealand "...Petty-bourgeois extremism...". Nationalism and other elements are important for the "petty bourgeois": "...the use of a conspiracy theory, racism, anti-Semitism and sexism."¹. This thesis does not intend to analyse the "petty bourgeois" trends of the NR but to focus instead on the "financial" NR, a trend based on corporate international property and the International Division of Labour within the context of the global economic system.

The origin of the "New Right" -a term coined by different authors-, must be searched in the "First World countries": firstly, in the U.S.A. and Britain and later, in other European countries, Canada, Australia and New Zealand. Some authors argue that it originated at the end of the sixties², or as earlier as 1919³. Different arguments, of the financial NR must be discriminated since five schools -on society human, nature and political action-, have evolved:⁴

- 1) The "Minimal State" or anarchic capitalism,

¹ Spoonley, The Politics of Nostalgia, p. 30

² See: Jesson, B; Ryan, A. and Spoonley, P., Revival of the Right, 1988.

³ See: Levitas, R., The Ideology of the New Right, 1986.

⁴ See Appendix A: "Summary of New Right Schools"

- 2) The "Chicago School" or "objective economy",
- 3) The "Public Choice School" and,
- 4) The "Austrian School" of "subjective economy"¹.

These schools reflect the internal contradictions and ambiguities within the neo-liberal struggle for the perpetuation of the economic and political power of those engaged in two main forms of capitalist production². On the one hand, the large corporations which defend international property with no "moral" concerns except the "profit motive" value. On the other hand, the "old" traditional petty bourgeoisie" which defend national enterprise, personal property ownership and small-scale business³; although:

...while they support those elements of capitalism that are considered fundamental for petty-commodity production, the petty bourgeoisie retain a profound suspicion of monopoly capital and production⁴.

This suspicion is elaborated as a "conspiracy" of an international elite of Jews, Masons and Communists leaded by the Rockefellers and other family elites, in order to impose a "New World Order" where... "Life is like an ant colony, and every aspect of one's career is

¹ Green, D., The New Right. The Counter Revolution In Political Economic and Social Thought, 1987.

² See the argument on "good" and "bad" capitalism of the traditional petty-bourgeoisie of Spoonley, 1987 quoting Edgar, D., 1977 in Opus cit. p. 34.

³ See Spoonley, Opus cit. p.25

⁴ Spoonley, P., Opus cit., p. 28

mandated by the State. The family unit has disappeared and even reproduction is rigidly controlled by the State"¹. On the contrary, they assume that the family must be the starting point of a system of social hierarchies; for example, the hierarchies within the patriarchal family with a particular "moral" racist and sexist framework of beliefs, assumptions and arguments. Some NR "petty-bourgeois" groups which partisans promote the "Conspiracy Theory" are offering books and pamphlets in the streets of Christchurch. Although -according to Spoonley-, "...they do not seriously challenge the major political groups..."². Nevertheless, "the major political groups" of "National" and "Labour" have been "seriously" challenged and effectively controlled by the corporate financial NR which holds international property. This process marked the transition in the past decade from a capitalist welfare state -still "paternally" concerned with collective social ends-, into a free-market society which major aims are to reduce state intervention and to dismantle social welfarism.

New Zealand is apparently ruled by the politicians from the "Beehive" in Wellington. However, the country is ruled by business-"men" from "Downtown Auckland" and from overseas, in order to benefit a rich elite³ which

¹ Allen, G. Say "No!" To The New World Order", p. 4

² Spoonley, P., *Opus cit.*, p. 266

³ See: Rosenberg, W., National Decomposition Under De-regulation, p. 4-14 and Scenario for Financial Disasters, 9-14;

fortunes are protected by the "internationalization" of the "old" nationalist markets:

As Kashiwagi (1986) defines it, this increasing "internationalization" is simply "The process whereby the major national markets become integrated into a single world market that transcends geographical distance and time zones to operate on a 24 hour basis". This process has blurred the distinction between domestic, foreign and international banking.¹

The economic basis of the financial "New Zealand New Right" lies on the neo-colonial hierarchy of nations, the Sexual International Division of Labour which makes profit with the exploitation of women's labour and the background of mechanisms and privileges of Multinational Corporation (MNC). The New Right moves actively within the global financial markets as a total, independent network, ruling for above the frontiers of the Nation-states. Megacorps, whose highest rank beneficiaries are kept anonymous as much as possible -since nobody knows who the "real" owners are-, are armed with a new computerized and sophisticated technology which transfers capital from one continent to another in a matter of seconds. They have influenced the governments of the nation-states to "liberate" their controls and barriers that impede this growing richness to flow in their personal pockets. New Zealand is a pioneer nation-state, smearing its frontiers to become an "internationalized" servant of the "global New Right":

Internationalization will be moderated when real rates of return on New Zealand financial assets begin to

Simpson Tony, Who Runs the Country Anyway?, p. 12-16.

¹ Savage, J. Financial Centre Prospects For New Zealand, 1988, p. 7

contract. But even without this inducement the heightened awareness of New Zealand in the minds of foreign investors, the increasing overseas business activities of New Zealand corporates, widespread availability of modern telecommunication technology, and the shift towards more open financial systems both here and overseas, all mean that integration with world capital markets will undoubtedly continue."¹

And "overseas business activities of New Zealand corporates" are intrinsically the business of New Righters. They are -as individuals- hidden, well protected, behind Transnational Corporations (TNC). The individual "invisibility" behind TNC is possible, because corporations are legal entities created and sustained by individual rights and are based on the dogma of the capitalists system of economy: freedom of association and freedom of contract. The requirements for the creation of a corporation varies in each country but -in general-, it includes: to register a charter which establish the articles of incorporation including the name and address of the business, name and addresses of directors and secretary, the duration, the purposes, the number of shares, the voting rights and the amount to be paid to commence the company.

The goal "of the corporation" is to grow and increase profits. Associated by contract, shareholders motivated by profit own the corporation(s) for their own benefit, welfare and self-interests, while directors, officers and managers also benefit with high salaries and

¹ Savage, Financial centre Prospects for New Zealand, p. 87

commissions. Unlimited growth make the global market system to run towards the dominance of few corporations:

Taken together, all these factors have thoroughly confused our original notions of the role of the publicly held corporation and erodes its legitimacy. Ideologically, it has become a mere collection of persons and matter with considerably potential power -political and social as well as economic- floating dangerously in a philosophic limbo. If it survives, as it probably will, it has to be made legitimate. The only questions are how and by whom¹.

Nevertheless, few individuals behind the "mere collection of persons" within corporations are obsessed with material growth and richness and greed. They must influence the policy making process in order to diminish -and better to eliminate- any government intervention such as taxation, which interferes with their fundamental profit goal. And economic power of individuals behind corporations runs parallel with their political power. Acting as the "state-funded" politicians, at the end of the political taking over, the New Right individuals -the super-rich elite-, has become the "invisible government".

The NR arguments in defense of "individual property rights" are fallacious, because *corporate* property is not *individual* private property. The procedure of the corporation is as follows: the "shareholders" agree to invest voluntarily in the corporate profit-oriented process, while officers, executives and managers - not necessarily owners themselves-, are the ones who govern

¹ Lodge, The New American Ideology, p. 208

the corporation(s). The managers make major decisions without having to consult the owners. This delegation of power of decision is stipulated by the shareholders consent and contractual authorization. This polarized mechanism "owner (ownership)/manager (control)", is totally contradictory with traditional capitalist principles: "Because this separation of ownership and control, giant corporations are no longer private property and do not deserve to be treated or protected as private property by the government..."¹.

However, NR concepts of "Property Rights" and "Individual Freedom" are never explained in the context of their internationalized property nor in the context of the dualistic mechanism "shareholders/managers" of their mega-corporations. In the reality, the internationalized-corporatized property is the hidden property that NR "individuals" are defending at the level of the rich elite, with the support of the politicians. It is their strategy in order to avoid taxes and keep their privileges intact while becoming more influential in national and international policy making.

An example of this internal contradiction of the NR is evident in a statement written by one of the most famous New Right thinkers, Milton Friedman, who twenty seven years earlier said:

¹ Hessen., R. In Defense of the Corporation, 1979 p. xii

But the direction in which policy is now moving, of permitting corporations to make contributions for charitable purposes and allowing deductions for income tax, is a step in the direction of creating a true divorce between ownership and control and of undermining the basic nature and character of our society. It is a step away from an individualistic society and toward the corporate state¹.

The above phrase indicates a major internal contradiction of the new Right, since the "global financial New Righters" are precisely "corporated" within Multinational Corporations which have created "...a true divorce between ownership and control...". Hence, corporatized New Righters are not entitled to talk about *individual freedom within the capitalist system*, because -being in favour of *individualism within corporatism* on a global scale-, they are in opposition to the main principle of capitalism which is the liberal conception of individual human nature:

...Adam Smith's defense of private property and capitalism (which he called "the system of natural liberty") was based on three assumptions about the typical business firm: that it would be small-scale, that the individual owner or small group of owners would invest personal savings in their business venture, and that they would manage it directly, reaping profits or suffering losses, depending on their own personal managerial abilities².

On the contrary; the wealthy elite of "global financial New Righters" are totalitarian, keeping themselves hidden behind their corporations: the elite at the top and the masses at the bottom of their economic machinery.

¹ Friedman, M., Capitalism and Freedom, p. 135-136

² Hessen, R., *Opus cit.*, p. xii

For the "super-rich" elite to keep their positions in the society they must defend their "Four P's": Property rights, Power, Privileges and Profit. Hence, they need to achieve a legal framework that: makes corporations legitimate and omnipotent; reduces the rights of everybody else; reduces the power of the state to a minimum influence; and eliminates welfarism and public property.

To achieve those aims, the elite of the "global New Right" must also be part of the state and to politically penetrate all high levels of decision-making. Progressively, under their ideological and economic influence, the state apparatus must be limited and left without "public" property, in order to become its "efficient" defender. For example, one of the solutions to the needs of the New Righters to be in political control of the nations all over the world, has been to assume key positions in order to influence central administration. This has been possible through the privatization of the public assets and the "corporatization" of the public enterprises (State Owned Enterprises) which directors are New Righters.

Corporations have the advantage of a perpetual (or eternal or immortal) "existence" which exist independently of the cycles of life of its individual owners and/or changes of membership. Other advantage is that, having a distinctive legal identity, corporations -

acting as a "screen"-, are permitted to sue (and be sued) in its own name, as a unit, without naming *who* the real and concrete owners or shareholders are. The corporations enjoy the benefits of inviolability and confidentiality. Another advantage is that -being considered a fictional legal "person" (or "individual")-, if the corporation can not meet its debt obligation outside creditors, the shareholders can not be assessed to make up the deficit. But this raises another internal contradiction, since "...anyone who proposes to deny or destroy the rights of a corporation is really attacking individual rights"¹.

The ideological paradox of the NR means that -the capitalist principle of "individual rights"-, apply exclusively for the benefit of the individual shareholders in a "profitable" sense: whereas the individual *have the right* to profit in the context of corporate privileges, the same individual does not have to assume any concrete and personal responsibilities. Also, the same individual is not personally liable and is safe from paying the debts of her/his own corporation(s). The managers/officers of corporations are protected as well by the legislation: it is very difficult to prove the individual responsibilities such as personal mismanagement or administrative corruption. In summary, within the context of "impersonal" freedom and growth of the corporations -in terms of assets, sales and profits-,

¹ Hessen, R., *Opus cit.*, p. 46)

two conditions become possible: unlimited possibility of individual richness and unlimited irresponsibility. The results is clear: the more profit the better, and with economic growth of individuals behind the "impersonalized" mega-corporations, blends political growth:

... corporate power permeates virtually every facet of public life. Corporations largely control the legislative process, distort the information received by the public through the media, and determine, to a significant extent, the functioning of our educational system and the direction of academic research¹.

The NR "corporate power", in order to keep the convenient hierarchical order between nation-states, is influencing governments all around the world to adopt many contradictory international economic policies, some to protect a free trade system and some to control it. This contradictions reflect deep internal conflicts of the hierarchical order between nations, because some respond to domestic and national interests, some to groups of nations and some to global interests. Some policies encourage competition while others, cooperation; trade barriers for foreign products are being changed for free barriers, preferential policies are followed by non-preferential policies. Between these contradictions, the world is at the edge of a catastrophic collapse of the global economy with an inevitable tendency into a still more concentrated ownership, controlled by very few:

The assets of these multinational giants exceed the

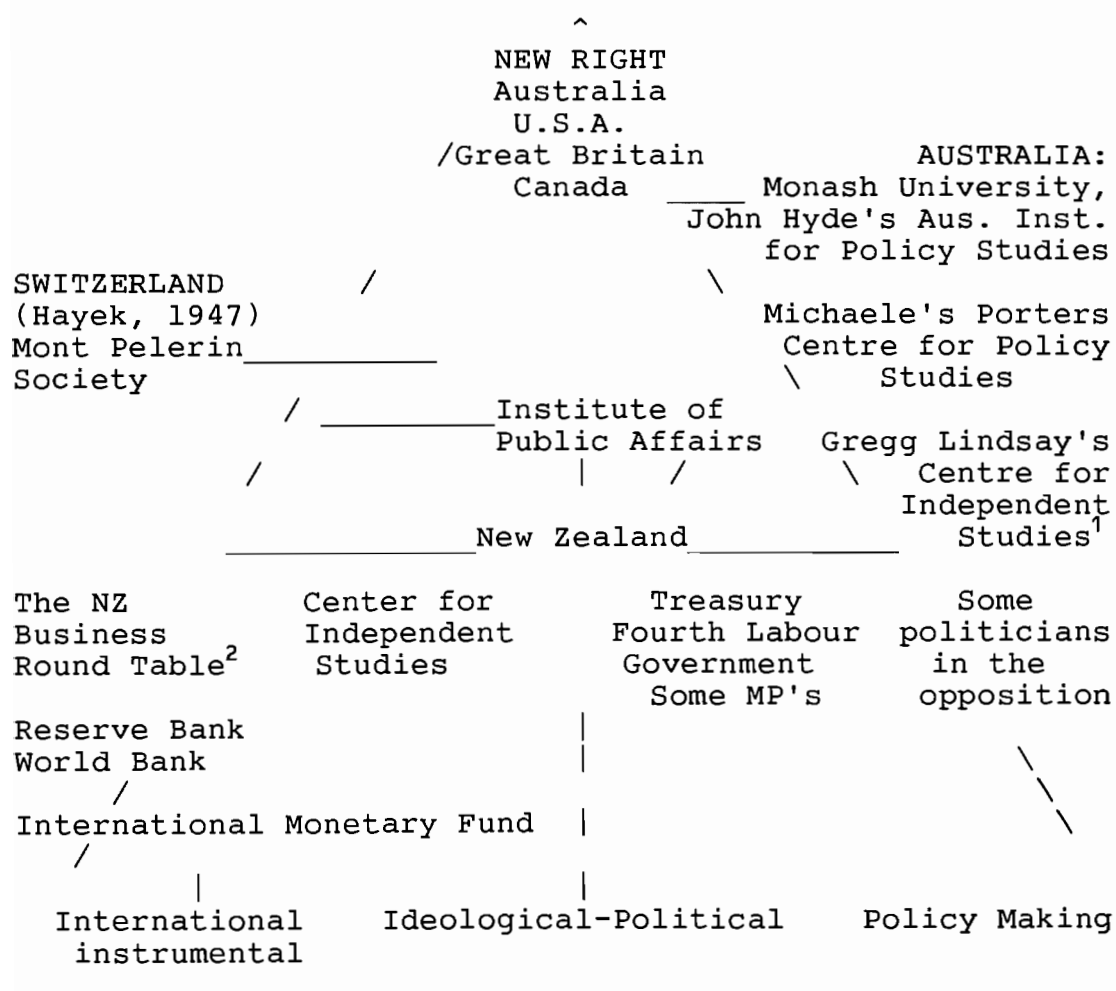
¹ Capra, F., The Turning Point, p. 232

gross national products of most nations; their economic and political power surpasses that of many national governments, threatening national sovereignty and world monetary stability¹.

The above NR ideals are in the process of being in New Zealand, a concrete reality. The global corporate financial NR works in New Zealand through a three-dimensional perspective, interconnected with similar international organizations:

¹ Capra, The Turning Point, p. 232

Fig. 1. GLOBAL CORPORATE FINANCIAL NEW RIGHT
IN NEW ZEALAND



¹ "Times": 14-2-88

² The New Zealand Business Round Table (BRT) corporates are merging for self-protection through internationalization. This is analyzed in : The Business Roundtable II. Trade Union Education Authority, Wellington, 1989. Tables 3 and 4 (Appendix C).

b) The New Zealand Business Round Table and
Center for Independent Studies

Firstly, I will analyze the influence of the New Zealand Business Roundtable (NZBRT). The corporate rank in New Zealand, have been mutating through mergers after the October 1987 crash and the process of corporatization of State Owned Enterprises (SOE), although ideologically, they keep together. The political process of taking over by the "New Zealand Business Round Table" has been methodic and constant:

Firstly, the BRT concentrates the value of NZ public companies to an extreme degree, accounting for about 77% of the total value of the market. Fletcher Challenge, Brieley's and Goodman Fielder Wattie alone account for 42% of the stock market. Secondly, there are hardly any major public companies that are not in the BRT. There are really only four who aren't there: the two newspaper companies (INL and Wilson and Horton); Robert Jones Investments and Fisher and Paykel¹.

Also, corporate interests of Australian, British, North American and Japanese "multinational giants", are absorbing New Zealand companies, while NZBRT companies have overseas subsidiaries or are subsidiaries themselves. Thirty one members of the NZBRT who are the directors of 147 companies in the private sector, have been appointed by the government as directors of 7 "state" owned enterprises. These directors have ideological controlled the New Zealand government to the point that New Zealand has become as a cheap "second-hand

¹ For a recent analysis of the historical process of the NZ New Right since 1970, see: TUEA, Opus cit. 1988., p. 12

super-market". The prices decided by the government - manipulated by the New Right forces- for the sale of its "public" assets (including its "natural resources"), could not be done cheaper, easier and quicker for Transnational Corporations to become the "new" owners.

The ideological basis of the New Zealand New Right must also be searched in the NZ Centre For Independent Studies NZCIS which "credo" could be summarized in one "maximum" and three "minimums": maximum free-market and minimum tax (for the Corporations); minimum social welfare and minimum state intervention. NZCIS also defends the NR principle of law as a framework for letting the free-market really "free" to practice selfish individualism which is considered the ideal road to "Freedom". The origin of this institution must be searched in the guidelines of the "Mont Pelerin Society", founded by Friedrich A. von Hayek in Switzerland in 1947. Also, Australia pioneered a similar institution in Sydney in 1986. Eight months later, the New Zealand New Right connections established the New Zealand Branch of the CIS:

Lindsay (Greg) says he found wide support for his plan to form a New Zealand Branch of the CIS among New Zealanders attending the Montpelerin meeting, such as State Services Commission chairman Rod Deane, Planning council chairman Ian Douglas, Canterbury economics professor Richard Manning and Roundtable executive director Roger Kerr¹.

The ideological penetration of the NR is flowing

¹ New Zealand Times, 4-5-86, p. 15

constantly from the many international "Business Round Tables" and similar overseas "Centers for Independent Studies" into the minds of the staff of the New Zealand Treasury Department, the Reserve Bank and the minds of some politicians and bureaucrats of Labour and National parties. This ideological penetration has been possible with the support of economist, journalists and other professionals. The NR ideology of the "internationalized marketeers" came to New Zealand from overseas -via Australia-, penetrating the Wellington Beehive at all the spheres of Government policy. Now the NR constitutes a government in itself, acting behind the political parties. It has also penetrated the roads and streets of New Zealand through the political action of "new" old parties and groups of the "new petty bourgeoisie". For example, the "Australian Center for Independent Studies Limited" -which is an ideological body of the global marketeers of the NR- is supporting new political groups such as the "Kiwi Associates", helping to compile, to publish and to disseminate information for:

...the promotion through New Zealand of the values of individual responsibility and individual liberty, with the principal aim of having these values reflected in the essence and actions of our duly elected governments¹.

...although their partisans do not say that "individual responsibility and individual liberty" are not possible within a global society of masses consuming the products and services of the corporate and

¹ Carter, H. J., The Voice of the People, 2nd. print. published by "Kiwi Associates", New Zealand 1989., p. 1.

internationalized "financial New Righters." It seems that this bizarre version of selfish "individualism" have effectively circulated within the government.

I will continue focusing on the NR process of policy making and administration. After many internal divisions of the Fourth Labour Government the political confusion of the last seven years in this country starts to have some sense. Few and isolated concepts were leaked to the public in documents or through the media before the electoral campaign that could offer clues to interpret "the revolution" already happening inside the government. The still "collectivist" and "social welfare" oriented "New Zealand Labour Party 1987 Document", did not mention the economic changes that were going to be imposed by force and surprise to all New Zealanders; policies such as "... the abolition of exchange controls, the deregulation of finance, abolition of subsidies and incentives, the floating of the dollar"¹. These changes were introduced after the election in an alarming speed through overriding orders which were imposed by surprise (and accepted without opposition) to all. The New Right started its "free-market revolution" claiming that whatever benefits the rich elite will benefit society; an assumption based on false and distorted capitalist principles of "individualism" and "individual property rights" not

¹ Jesson, B., Fragments of Labour, 1989., p. 64

applicable to their global enterprises. On the contrary...

Individualism had destroyed individual freedom; property rights had come to diminish, not to protect, the political and social rights of millions; competition to satisfy consumers had become increasingly irrelevant to community need; the limited state, supposedly sensitive to individual freedom, had in fact become the servant of the powerful¹.

The New Right assumption that the free-market will improve the general social conditions of life must be analyzed within the context of the process of change in the global economy: from an "old" pastoral and manufacturing-industrial age with emphasis on goods, quantity and mass-production of cheap products into a "new" era of information and cybernetics with emphasis on services, quality and elitist production. These changes were based on the hierarchical economic order established by the nation-states under the ideology of "Development" after the Second World War. In the rich countries of the "First World", the Keynesian welfare state² was based on the assumption that:

...additional investment will always increase additional employment, and thus increase the total level of income, which will in turn lead to higher demand for consumer goods. In this way investment stimulates economic growth and increases national wealth, which will, eventually, "trickle down" the poor³.

¹ Lodge, G.C., "The New American Ideology", p. 155

² Name after John Maynard Keynes.

³ Capra, The Turning Point. Science, Society and the raising Culture, p. 221

The Keynesian model of "appropriate policies" determined by "government intervention"¹, is in decline. Instead, "professional" politicians have adopted the neo-liberal values of the New Right which are "anti-state", "anti-bureaucracy" and "less government" oriented. The industrial and financial sectors have actually influenced the politicians in government and opposition in order to -eventually- eliminate any "socialist", "collective" or tendency towards "social welfare". Effectively, the process of policy making must eliminate any tendency towards "equality". In this sense, the NR has moved "efficiently" within the political parties as a political party in itself; its active members gain access to high levels of decision, control resources and information, take key leader positions and influence parties in government and the opposition. Members of the NR use the ambiguities of the politicians for their own advantage, pressing to change policy and legislation towards a totally free-market economy.

The NR have achieved in less than ten years of influence, to penetrate the highest political levels of decision of all the governments of the "First World" in order to establish their own policies based on the following ideal four "rules of the game" according to which: *Policy has to be anti-state and anti-public*, based on individual preferences as expressed by vote. It

¹ Capra, Ibid, p. 221

must see that not all interest are regarded as equally legitimate when it comes to participation in policy making. *Policy must give primacy to individual ownership and property rights* (since corporations are "individuals"), while reducing the collective welfare of the state and minimizing the economic ownership of the state with the privatization of all the main publicly owned utilities, industries and enterprises. *Policy must establish that the government is not responsible for economic growth, for full employment, for extensive social welfare and for redistributing wealth.* Policy, instead, must establish that the state priorities must be limited to external defence, internal security, law and order letting the market forces free "to regulate themselves". *Policy is by and for an elite.* Hence, it would be "ideal" that selected groups and individuals sponsoring these policy goals of the NR must have access to policy process. This means that -only those opposed to collective bargain and against the welfare state-, can participate. Or at least an economic elite of business-"men" would have preferential treatment in the formulation of policy. In the process of transition towards a NR society, those excluded from the policy making process, -eventually-, would be forced to base their opposition on unlawful ways.

These have been the "four steps" of policy-making in New Zealand under the Fourth Labour government for changing a society that used to be pluralist, with

collective and social-welfare "concerns" and based on a centralized economy, highly regulated by the state. In five years the NR has achieved in New Zealand to influence a fundamental change in the total legislation system for its own benefit and is already organized and well established within all levels of the government, in order to implement the new policies on a national, regional and local levels. Legislation "new Right" style" must be oriented towards no control, no barriers. The policy making process must let the "invisible hand" to guide "freedom of choice" and "optimum" allocation of resources for the wealthy without interfering in self-regulation of private interests; it also must give free range of action to market forces. This process happens independently of government elections: it does not matter which party is in power.

The "political" campaigns favours the New Right "revolution" within the Labour and National parties. The campaigns in 1990's include the political manipulation of a "green environmentalist" image concerned about the "environment" and the "management of natural resources". The paradox of the actual "environmental" decade is in relationship with "productivity". I will argue that ecological constraints or limitations to "development" and "growth" are considered a menace for the "social stability", not only by some New Zealand "entrepreneurs" in the business sector; neither are "green restrictions" welcomed by those involved in what is considered "the

productive sector". Workers and farmers have been specially trained by the hierarchical society to perform anti-ecological work in the technological industrial and pastoral systems of production. However, -because they have not been given other options-, in their battle for keeping their "productive sector" running within the machinery of capitalism, they try to survive the successive waves of depression of the economy: the workers struggling through the unions, in defence of their jobs in polluting industries; and the conventional farmers, reacting in the defence of their polluting farms.

The authorities of New Zealand have not only "officially" sponsored the production of chemically grown monocrops and chemically-fed animals for export but have sponsored the logging of the native forest which has been cut down for exporting wood chips to Japan at an alarmingly rate. Recently and suddenly, the "environmentally blind" economic elite, defended by free-market minded politicians started to manipulate a "green image" for the next electoral campaign: the authorities decided to ban the export of native timber in a small sector of the forest, while continuing logging million of tons of native forest in other areas. Due to the lack of planning and social provision this measure has affected an entire community of the West Coast which depended on the export of native wood. Since the government did not planned social provisions such as to offer other

alternatives to employment or organized new opportunities for community business -as a consequence-, workers in the mills and farmers logging native timber in the West Coast of New Zealand, have protested violently against the "greenies"¹. They blame the "conservationists" for influencing the government and are reacting strongly against the "green" and "environmentalist" policies, suddenly introduced in the community without enough preparation and foresight. The image in the T.V. was that -for the government-, the trees are more important than the People.

With the deregulation of the economy, dramatic actions of People against Nature are seen frequently in New Zealand. For example, two years ago, after a court ruled to fine a farmer for cutting a native bush in his farm, farmers all around the country threatened to cut down all the native bush on their private farms, if this sentence was engaged². These are not isolated cases. Forced by the economic changes towards a totally free-market economy of "growth" and "development" for export, in the last five years un-subsidized farmers have dumped thousands of litres of milk in the roads because the stoppage of transport unions. Farmers who have let millions of sheep and goats to destroy the ridges of

¹ A contemptuous name used in New Zealand to define people acting in defense of the natural "environment" or holding "conservationist" positions.

² "The Star". Christchurch, New Zealand, July 20, 1988, p. 4.

mountains and hills causing deep erosion all around the country have also killed the animals in communal carnage, standing around a hole in the ground and shooting the animals inside, because the lack of food and water.

Despite the environmental destruction they cause, the business elite, the unions and the farmers, are all defending on different grounds the same unsustainable "productive" economy of "growth" and "development" that keeps them in their positions. It is an economy conveniently made "official" by the politicians for their own perpetuation as rulers (and subordinates) of the industrial-technocratic society which needs -as a measure of success-, permanent growth and expansion. Although the politicians have learnt to manipulate the imagination of the public with "green" images to capture their votes. But permanent "growth" endangers the global cycles of Nature; while "development" and expansion of the economy leads towards concentration of power in a still more reduced business elite.

2) Case Study 2. Ecological Adult Learning in New Zealand (1982-1990)

The following case-study in New Zealand is analyzed in the context of rising unemployment during the Fourth Labour Government implementing "free-market" policies, since -for two years-, "unemployed" people were the main participants in ecological adult learning courses. The

case-study starts when the peak of the economic, political and social New Right "revolution" was happening in New Zealand.

Before the Fourth Labour Government started to rule the country, maybe many New Zealanders were experiencing "almost the same" feeling that I have had three times in my life since my childhood : of social uncertainty, rumours and speculations that antecede the military coups in South America. Years of political conspiracy by the military in South America, make people suspicious and uneasy; but nobody, except few, really know what is happening until the surprising taking-over of the government by the military is officially announced by the media. It is only at that moment when the "feeling of conspiracy" is realized as "true": by then, it is "too late" to react. Effectively, whereas the New Right "revolution" was happening in New Zealand many people - myself included- did not understand its implications until it was "too late" to react.

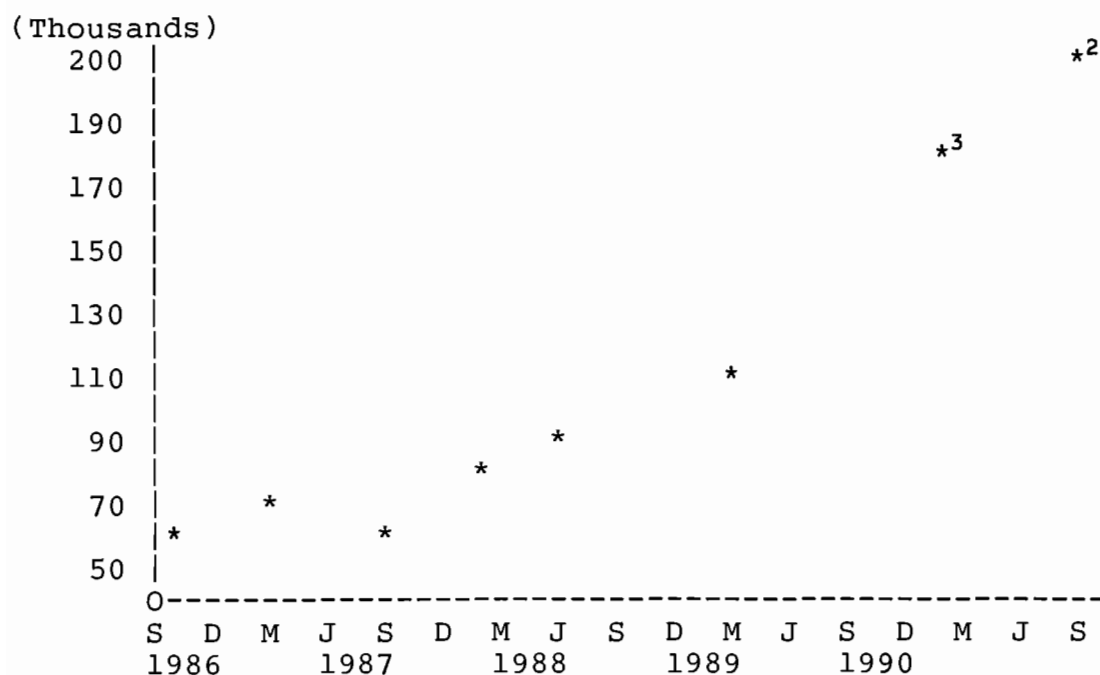
The New Zealand case-study will focus on the "unemployed" people and will explain the NR ideological influence in unemployment issues; specifically, the influence of the ideology of Milton Friedman and the Chicago School of Monetarism or "objective economy"- which, adopting a "naturalist" language, insist that the "nature" of unemployment is something "natural":

There is, in Friedman's terminology, a 'natural rate of unemployment', which depends on real factors -how

smoothly the labour market adjusts, the extent of competition or monopoly, restrictive practices, and generally, how well producers are meeting the requirements of consumers. A government can have a temporary effect on the rate of unemployment by changing the money supply, but in the long- run there is no escape from the 'natural rate' by monetary manipulation alone¹.

On the contrary -adopting the above "naturalist" language of Milton Friedman-, I will argue that "there is no scape" from the New Zealand government -Labour or National- which, instead of having a "temporary effect on the rate of unemployment", have an "unnatural" "permanent effect" on the climbing figures of "natural" unemployment as seen in the following figure:

¹ Green, Opus Cit., p. 66.

Fig.2. UNEMPLOYMENT UNDER THE FOURTH LABOUR GOVERNMENT¹

¹Based on the Graph "Unemployment". Department of Statistics, The New Zealand Labour Force, Sept. 1989 Quarter., p. 8

² The "Christchurch Star" Wednesday, October 10, 1990. p.1

³ "The Press", "Jobless figure rises to 180,000 in March quarter" , Saturday 19 May, 1990 p.1

In 1990, there is a prediction that "full employment" will be possible in the near future, if the voters vote again in favour of the Labour Government... Is this promise of "full employment" another myth to be added to the old myths of an ideal New Zealand which "used to be" "equalitarian", "beautiful", "clean", "healthy" and "green"? If "Labour" and "National" parties are ideologically and politically manipulated by the global financial New Right ... then, where is this country heading towards ?

The New Right ideology of "Individualism-property rights-competition-limited state", is very similar to the predominant ideology before the 1930's depression, and maybe is announcing a worse depression than the "Black October" of 1987. New Right though assumes that... "An economic policy is optimal if it is directed..." towards "...increasing the chances of any member of the society taken at random of having a high income"¹. This "equalitarian" idea of economic policy has been adopted by the NR today becoming an open door for what I will named "equalitarian randomness". According to it, the "increasing chances" of masses of unemployed people are possible playing "Lotto" in the week-ends, the only way to have the "high income" of New Zealand millionaires and to be "equal" to them.

¹ Barry, N., Hayek's Social and Economical Philosophy 1979, quoting Hayek; p. 107).

The following stages of the educational work of Ecological Adult Learning developed in New Zealand will be explained in relationship with the conflicts and tensions within the context of the "New Right Revolution" sponsored by the Fourth Labour Government. The case study covers a period of eight years, from the moment of my arrival in November 1982 until today, in 1990:

Table 2. Summary of Stages. Case Study 2.

a) Stage 1: "Preparation".

From the moment of my arrival in New Zealand in November 1982, until December, 1983.

b) Stage 2: "Organization".

From December 1983 until November 1985, marks the inter institutional strategy, involving: Civic Pride Campaign, Employment Promotion of the Christchurch City Council (C.C.C.), Christchurch Environmental Educational Trust, Internal Affairs, Special Programmes Department of the Christchurch Polytechnic and the Labour Department.

c) Stage 3: "Action".

From 11-11-1985 until August 1987, it accounts for the development and growth of the courses under different policies for unemployed people, in the social context of dismantling the capitalist welfare-state and rising unemployment.

d) Stage 4: "Reaction".

September- October 1987, this stage accounts the conflict of with the ACCESS policy; the policy was officially adopted by the Christchurch Polytechnic in March 1987. In September 1987, the struggle reaches a crisis of national political dimensions, manipulated through the media.

e) Stage 5: "Consequences".

Will critically analyse from the end of ACCESS courses and the beginning of "Foundation Courses", based on the New Right Principle of the "Users Pay". This stage covers from October 1987, until 1990.

a) Stage 1: "Preparation" (Nov. 1982-Dec. 1983).

This stage explains the first conditions that made it possible for me to start ecological adult education work and action in New Zealand from the moment of my arrival in November 1982, until December, 1983.

Firstly, I learnt to be a "brown New Zealander". On the 16 of December of 1982, I came directly from Caracas to Christchurch -a city considered by some as "more English than London"-, got married with a white man of Scotch ancestry born in Ashburton -a rural town south of Christchurch-, and started to live in a south-facing, fifty year old house in Addington; this is a neighbourhood of factory-workers and pensioners that started after the second World War, not far from the central city. In order to survive the process of adaptation to a new climate, food, cultural shocks, prejudices, conventionalism and racism, I had to overcome many difficulties.

For three years I had to stop my thoughts in order to communicate in a language that I barely understood, speak or write which made me feel as if I were intellectually retarded. My forty one year life-cycle of conditioned behaviour on the "correct side" -that means, the "right side" skills-, were now totally useless, incorrect or illegal in New Zealand. Here the puzzling "left side" of is dominant and simple daily actions, such as: driving a car, walking in public places, dialling the telephone, switching the electricity "on and off" or turning the key to open the door; all these became an endless chain of "mistakes".

My overall ignorance about everything reached a

climax when I discovered -for the first time in my life-, that I am "just" "a woman" -that means-, a minimized sort of second class citizen. This discovery was combined with the feeling of being perceived by many as a "brown skin" stranger, an exotic "foreigner". To all that was also added the feeling of isolation, as I realized -when I read the statistics in 1982-that I was the second Venezuelan living as a permanent resident in New Zealand. Later I knew that the number "1" I had seen, statistically accounted for a Venezuelan woman-, who left the country soon after my arrival. In summary, I was a "true minority" here.

For months, all the people I saw in the streets of Christchurch were mostly slow-walking white europeans; until one day I saw somebody like me -of brown skin-, a man standing at the front yard of the Maori Department of the Christchurch Polytechnic. He told me that he was learning to speak Maori at the age of 37 because in his childhood teachers punished Maori children, hitting them with a cane or slapping their mouths if they dare to speak their own language at school. I could not believe it, since a teacher in Venezuela would go to jail for doing so. Since that day, I was not surprised when some white "pakeha" made me feel that I am a "brown somebody" -a subtle experience of "apartheid"- and discovered that I came to live in one of the "whitest" cities of New Zealand, which have been the site for more

than twenty racist organizations, including the K.K.K.¹

I started a learning process of "Uncovering Myths". New Zealand, defined by many as "Beautiful, Clean and Green", is a mythology, based on a body of common assumptions, beliefs and values such as: "beautiful landscape", "healthy people", "clean environment", "far from nuclear war", "equalitarian", "peaceful society. These are some expressions about this country that I had heard from many people. My self-learning activities started with "Living Knowledge" of the reality which started to reveal a totally different picture and, once the ecological awareness started, it also grew inside me a deep feeling of love for this land, a sense of belonging to this country and the needs to learn, to act and to participate as an active member of the community.

I also had to be prepared for the difficult task of -eventually-, to communicate and share ecological adult learning in english. In 1983, I received a Polytechnic certificate of "English as a Second Language", started to participate in the "Dance Workshop of the Spanish Society", became student of many short courses and started to travel in the South Island. I painfully understood that if I was going to stay and to work here I had to behave in a special way, to accept new formalities, rules and regulations and to adopt strange,

¹ See Spoonley, P., Opus cit., Appendix 5, p. 302-308

local customs in order to be socially acceptable. That means, to speak english well and efficiently; to repress my latin spontaneity and tropical sense of humour; to keep a distance of two meters between myself and others and to behave "cold" and "neutral" as white europeans New Zealanders do. All that process of "personal preparation", culminated in my becoming a New Zealand citizen on the 16-11-83.

(b) Stage 2: "Organization" (Dec. 1984 - Nov. 1985)

This stage marks the inter-institutional strategy, involving five institutions: Civic Pride Campaign, Employment Promotion of the Christchurch City Council (C.C.C.), Christchurch Environmental Educational Trust, Internal Affairs, Special Programmes Department of the Christchurch Polytechnic and the Labour Department.

The stage explains the process of "institutional participation" for promoting educational adult learning as a community pilot-project for the city of Christchurch, with the intention to train people involved in volunteer organizations through a charitable trust on promoting "environmental education". This "stage" culminates with the initial involvement of the Department of Special Programmes of the Christchurch Polytechnic.

In December 1983, Janet Borrette, the Executive Coordinator of the Civic Pride Campaign (CPC) knew about

the educational programme in Venezuela, through the chairperson of "Keep America Beautiful", who was visiting Christchurch: KAB is an international organization dealing with the problem of littering through the "Clean Community System"¹. Being from Santa Cruz, California, Janet was enthusiastic about the "Bio-dynamic French Intensive" (BFI) method of gardening and farming², and invited me to work as a voluntary participant in the CPC, for the beautification of the Christchurch City. Her idea was "to train" volunteer organizations, in order to recover sections of public land that she called "waste land" and to beautify them with BFI Gardens. I thought that the concept of "waste land" was nonsense, since "wild" environments, weeds, dead soils and rubbish-dumps are very important learning resources; the cosmetic conception of "Christchurch Clean and Beautiful" with emphasis on the "littering problem" would have to give a step ahead towards critical awareness: from the "waste culture" towards the "recycling culture".

We needed guidelines for the "Recovering Waste Land" Adult Education Project. In June 1984, I started to

¹In 1979, the KAB invited the Government of Venezuela to send delegates to a Conference in Atlanta, Georgia and Washington D.C., to which six Venezuelan attended, including Margarita Cardenas and I. When we arrived in the U.S.A., we discovered that the "Clean World International Conference" and "Keep America Beautiful", were sponsored by MNC.

²The pioneer in the 60's of the BFI, was Allan Chadwick, a lecturer of the university in Santa Cruz, California.

write a three page proposal for a Pilot Project "to be presented in September 1984, before the CCC-CPC Committee and Municipal Authorities". This document was followed by an extensive 52 pages document for the Civic Pride Committee entitled: *"Recovering Waste Land : An Educational Project For The Christchurch Community"*. On the 6 of June, the document and a slide-show was presented to a group of special guests in a meeting at the C.C.C. that afterwards, became the "Management Committee". At that time, Leoni Richardson, Coordinator of Employment Promotion at the CCC, helped us to find a vacant section of "waste land" of the Waimari County Council at Dyers Road, in Bromley. Janet had made a room available in the CCC for my work on bibliographical research and accumulation of teaching resources on environment, conservation, recycling schemes and health issues in New Zealand. Joy Kingsbury of the CPC was acting as the secretary of the team, Gary Moore from Internal Affairs Department was supporting our application for funding and John Palmer, a scientist of the D.S.I.R., was cooperating with rare species of plant material. At the same time -in order to be prepared to work in adult education, I had to participate in groups, "to teach" and to practice public speech. 1984 was an active year: I was invited to run a course on "Organic Gardening and Farming" for a group of 29 people in Oxford, started to run evening courses at the Christchurch Polytechnic and became a member of different New Zealand Associations such as the "Soil Association",

the "Good Gardeners" and many other groups that kept me busy attending regular meetings. I also received invitations from many other groups to be a "speaker" on environmental issues.

In September 1984, I attended for two weeks -day and night included-, a "Permaculture Design Course" in North Island. Also attending the course were thirty three New Zealand people and two Australian teachers.

"Permaculture", a term coined by Bill Mollison is defined by himself as:

Permaculture (**permanent agriculture**) is the conscious design and maintenance of agriculturally productive ecosystems which have the diversity, stability, and resilience of natural ecosystems. It is the harmonious integration of landscape and people providing their food, energy, shelter, and other material and non-material needs in a sustainable way¹.

One evening, during the course, after I made a slide presentation on the many aspects of the Venezuelan programme 1979-1982, people attending the "Permaculture Design Course 1984" said that what we have done in Venezuela was "permacultural". Some of them asked me for copies of the slides for them to show examples of the Venezuelan "permacultural development". Afterwards, I was invited by Robin Mc Curdy of "Tui Community" to run a "Permaculture Tour" in Nelson, Motueka and Takaka, going in partnership with an Australian friend, Billie Fort from the "Earthworks Farm". Between March and April 1985, our ecological workshops and public lectures

¹ Mollison, B. Permaculture. A Designers' Manual, Preface, ix.

attracted dozens of enthusiastic people.

The next step was to organize a trust: the "Christchurch Environmental Educational Trust" (C.E.E.T.). After various meetings, on the 6 of June 1985, it was agreed to set up a public and charitable trust, in order to make educational aims and objectives viable in the practice through the "Recovering Waste Land" (RWL) educational project. The Deed was ready on the 30-8-85, being the trustees of the "Christchurch Environmental Educational Trust" (CEET): Retired Professor George Knox (selected as Chairperson); Civil Engineer Roy Eastman; Jack Duncan Meechin, (Retired Composer and Chairperson of the Canterbury branch of the Soil Association), David Frasser Coull, John G. Chambers (selected as Treasurer) and Richard B. Leete (Solicitor).

Aims of the CEET:¹

To demonstrate in New Zealand, soil revitalization and the non-polluting methods and techniques involved in the reclamation of "waste" or "difficult" or "misused" land and its conversion into permanent, productive, balanced eco-systems.

To contribute towards reducing the volume of wasted materials and the problem of littering New Zealand's cities, through the recycling culture.

To establish an educational project aimed at dissemination of information and training of the New Zealand community in the knowledge and skills and the required new organizational forms to encourage ecological awareness and environmental sensitivity and thus to bring about a better health and quality of human life in New Zealand.

¹ Trust Deed of the CEET: 31-3-85, p. 5-6

To train instructors to become "multiplying agents" of the aforesaid process in New Zealand.

To design an educational center for the research, training of the community and demonstration of methods and techniques of non-polluting, small-scale, integrated and productive eco-systems to fulfil human needs such as food, shelter and energy minimizing and eventually eliminating, waste production.

To disseminate information on the aforesaid educational project through all the medias.

To participate in educational strategies related to the conservation of natural resources and environmental education and to co-operate with national and or international organizations with similar aims and goals.

To do in New Zealand as the Trustees may in their discretion consider incidental or conducive to the attainment of the above objectives."

The CEET and the Civic Pride Campaign continued having meetings working for the implementation of the "Recovering Waste Land Project" and the "Management Committee" selected me as the "Executive Officer". In August, I presented the Venezuelan educational programme on a national scale "Toward an Ecological Society" to an audience, in the library of the Christchurch Polytechnic. After the session, Cynthia Roberts, Head of Department (HOD) of Special Programmes (SPROGS), invited me to teach unemployed people for her department, and to develop a section of land leased by the Education Board to the Christchurch Polytechnic at the old "Seven Oaks" site in Opawa. I explained my commitment with the Trust to develop Dyers Road and she acknowledged my commitment to the C.E.E.T. It was clear that it was necessary an inter-institutional agreement of cooperation between the "Christchurch Environmental Educational Trust and the

Christchurch Polytechnic.

After some mail exchanges with Janet Borrette, a meeting was arranged. The meeting was held at the C.C.C. on the 20-8-85, with all the C.E.E.T. trustees and the HODS of SPROGS: Cynthia Roberts and Chris Beardsley. In that meeting it was agreed that the Polytechnic would participate in the "RWL Project" and that I become a Polytechnic full-time tutor "to train unemployed people" under the policies of "Young Persons Training Programmes" (YPTP) of the Labour Department.

I started the ecological design for two sections of land at Dyers Road and Opawa, and -at the same time- I had to design a course on "Organic Horticulture". I was also designing two centers. On the one hand, the section at Opawa, being "educational land" leased from the Education Board, would be for children and therapy gardening; on the other hand, the section at Dyers Road would be kept under the umbrella of the Trust, for future participants to develop "ecological business" for self-funding and for some participants to become self-employed, such as organic cooperatives, partnership or community business.

Before I became a "tutor" of the Christchurch Polytechnic I had worked voluntarily for two years, selecting audiovisual materials (films, slides, videos), gathering "teaching resources" and translating the 18

Venezuelan teaching posters into its english version. Also, through the Civic Pride Campaign, we had already approached recycling companies, environmental and educational organizations and we had achieved some donations and small grants for the Trust to set up an infra-structure at Dyers Road: plant material, a railway carriage, fencing, building materials, parts and pieces for a commercial-size tunnel house, few tools, a mini-tractor and water. Now, with the Polytechnic resources, we would also have a access to a classroom at Opawa, telephone, toilettes and a budget to buy tools and materials for the courses.

At that time, the policies for unemployed people were named "Training Assistance Programme". Firstly, I had to adapt ecological adult learning to a context of changing policies, since... "The government is committed to making the labour market to perform better."¹. From October 1985 -the Young Persons Training Programme (YPTP) of "training skills"-, were policies for those..." who are finding difficult to get a job"²; then, in January 1986, the government started a "new" scheme of "Training Assistance Policies" (TAP) as a transition towards another scheme -inspired by the New Right "free-market"

¹ Ministers of Education, Employment and Maori Affairs, Skills For Young People. A Discussion Paper On Transition Education and Training, p.3. reported by a special Caucus Committee to the Ministers on January, 1985.

² Promotional Brochure of the Christchurch Polytechnic, 1985. p. 4

ideology, named "NEW-RIGHT ACCESS". The goal of the TAP courses as a transition to New Right-NEW-RIGHT ACCESS, was to prepare unemployed people for a job and to be adapted to the fast changes of the New Right "revolution" from the patriarchal protectionism of the pastoral-industrial and welfare society with a state-regulated economy, into a patriarchal "hight-tech" society based on a de-regulated, free-market economy. The following structure of the Polytechnic TAP courses for unemployed people, involved 9 departments. The tendency towards learning in "short packages" was centered on "practical skills" which -after the course-, would be for "sale" to potential employers in the industrial-technological sector. This general aim determined the contents of learning and lengths of the courses, as follows:

Table 3

Christchurch Polytechnic TAP Courses 1985-1986.¹

Department	Courses	Weeks
Construction/Services	Woodworking Skills	8
	Painting-Decorating skills	6
Building/Architecture	Steel reinforcement in building	6
	Building and construction	6
	Concrete Placement	6
Office Systems	Typing, Office Skills	6
	Advanced Level	20
	Introd. Clerical Skills	6
Engineering	Garage assistant skill	6
Metal Trades	Engineering, metal skills	10
	Tool engineering, welding skills	12
Electrotechnology	Electronic Assembly	3
Art/Community	Group Training	20
	Marketing Yourself	2
	Drivers Education	4
	New Directions for men	6
	Commercial Driving	4
	Job seeking	4
	Trades for women	12
	Women in engineering as a career	20
	Women and Work	6
	Confident Living	4
Food and Fashion	Employment in the Meat Industry	6
	Catering skills	6
	Clothing and footwear	6
Special Programmes	Introduction to caring	20
	Polynesian Performing Art	20
	Creative Arts	12
	Horse management	6
	Basic farming	12

¹ Data from the promotional brochure "Training Programmes" of the Christchurch Polytechnic, 1985.

As seen above, besides courses for "job skills" there were also some other courses considered for "life skills", such as: "Confident Living", "Women and Work", "Polynesian Performing Art" and "Creative Arts" which later would be eliminated under the NEW-RIGHT ACCESS policies. The ecological courses had to be constricted within the above context as a "life skills" course.

The Nature of the Institution was hierarchical. In 1985, "Special Programmes" was separated independently from the "Department of Art and Community Studies" and it became the "Cinderella" of the Polytechnic. It was a Department which staff were mostly women and would offer courses exclusively for "the unemployed". It was made "invisible", almost isolated, away from central administration and far from the heavy buildings made of concrete or bricks and surrounded by trees, confined to boxes of still more concrete. These were the buildings serving as the headquarters of a hierarchy of male dominated, "major" departments; these were teaching "official and "permanent" careers, "academically" recognized by the national system of "awards". The male dominated wing of the Polytechnic has more prestige, more permanence and continuity and offer better conditions of work for the tutors. The world of concrete and cement, and native trees confined within more cement, is the patriarchal side of the Polytechnic known as the "Boy's Club". Maybe it is a coincidence that in those years, the Department of Maori Studies -as another "Cinderella"

of the institution~, was also given a "pre-fab" classroom, far from the "John Hercus Centre".

Nevertheless, when I started to work in the SPROGS Department, the "feminist" environment was encouraging and supportive. Soon I understood that I was working in an institution of "liberal" feminists in permanent struggle with the male dominated central hierarchy of the Christchurch Polytechnic. Although most of the teaching and clerical staff were women, the internal structure and administration of the SPROGS Department was still hierarchical and conservative -as a pyramid vertically administrated~, with two women at "the top" as "Heads" of Department. It followed "downwards" by "Course Supervisors", "Home-Tutors", "Full-time Tutors", "Part-time Tutors" and "Students", all with the support of the "allied staff" performing their administrative and clerical duties in a permanent state of tension and stress. This "feminine" hierarchy in 1985 was going to have an important influence in the development of political events in 1987; at that point, I will raise the analysis of power, control, rivalry and loyalty between women.

I also had to adapt the courses to a hierarchical conception of education based on the formal relationship "tutor-student" and to a language of "teaching", "training" "trainee" and "skills"; I had to fill forms, to control attendances, to interview and select people,

to keep records of each individual, to report on time-tables, on "contact" and "duty" hours, on performances; and -very important-, to provide structure; and - shamefully-, to fill bureaucratic forms with my own value-judgement on the learning process of other adult people. Also, like many others, I had to be a "good will" tutor, working many "extra" hours without being paid for it: although five years later, in 1990, the "union" of tutors, Association of Teachers in Technical Institutes ATTI, asked their members to stop being "good will" tutors.

I had to propose a course during the transition from "STEPS-YPTP" policies into "TAP" policies and from these, into "NEW-RIGHT ACCESS" policies of "training" the "unemployed" persons. Firstly, I proposed a YPTP course entitled "Organic Horticulture" which was approved by the "Head of Department", but also had to be approved by the bureaucratic administrators of the Labour Department. Their opinion, based on prejudices and assumptions on unemployment and "training" was that -unemployed people, or what they defined as "trainees"-, were "lazy" and would not commit themselves to stay on a course for longer than 6 weeks. I had to argue that a course of less than 20 weeks would not be enough time for the "participants" to fulfil their needs of "learning".

Also, I had to find a new name for the new TAP course-proposal; being from Latin America, means that the

nature of my mind and language is baroque and proposed a different name, maybe too long and complicated for the New Zealand mind: the "Sustainable Productive Eco-Systems" course. A 20 weeks-long full-time course based on ecological principles, was immediately simplified as "SPECS" and finally, on the 25 of October, the Labour Department approved the course-proposal starting on the 11-11-85 under the "new" TAP policy in transition toward ACCESS, "...a comprehensive regionalised system of labour market training..."¹:

The Training Assistance Programme, which took effect on 1 January 1986, represents the first step in the introduction of the ACCESS concept. It merges the 'School Leavers' Training and Employment Preparation Scheme (STEPS), the Young Persons Training Programme, and the Adult Retraining Programme. ...introduces a greater degree of flexibility in access to training and the scope of options available to trainees².

I was not going to be forced to accept the hierarchical concept of "training" and "trainee". For my course proposal I adopted the official concept "student" although as a synonymous of "participant". At that time maybe few tutors knew what "ACCESS" really means, although I would know it two years later. Success of the "training-course" and of the tutor was guaranteed if the "trainees" would become employees with a salary paid by the meat or the building industry or by any type of private enterprise, in which case the tutor would be "permitted" to keep the job. Temporary Polytechnic

¹ Ministers of Education, Employment and Maori Affairs, Skills For Young People. A Discussion Paper On Transition Education and Training, p.1.

² Labour Department Annual Report, 1986. p. 45

contracts were stipulated for the length of each course and would not guarantee the continuity after the course to any tutor, even to those fortunate ones -like me-, with a full-time job. That the students get a job subsidised by state after the course was still not considered a "failure" of the course (and/or of the tutor) and that "the students" find and stay in a job after the course, was not a compulsory policy for course funding:

When you have completed a course are you guaranteed a job? The short answer is no. However the Department of Labour will make every effort to help you to find a suitable position. They can more easily do this the more skills you can offer an employer. By attending a training course you will provide yourself with a skill which you can then "sell" to a prospective employer¹.

I started to feel in conflict with the idea of considering people as a merchandise, to the point that there were special TAP courses for "marketing yourself"; but -at that time- the "free-market" ideology had not been "officially" influenced the style and language within the institution, as it would happen two years later. Besides, the SPECS course was not compulsory intended to act as an employment agency, for the "students to get a job after the course". At the end of October 1985, the Department offered the position of "part-time tutor" and an exceptional woman was selected: she was Yvonne Steinemman, graduated in Horticulture at Lincoln College with a background on Permaculture design. We worked a rational budget, started to organize

¹ Christchurch Polytechnic, Promotional Brochure, 1985-1986.

ourselves in search for resources, promoted the course and selected 15 people. We were ready for action.

c) Stage 3 "Action": 11 November 1985-August 1987.

Our educational work and action started precisely in that period of transition, when the new ACCESS policy under the ideology of "education as a capital investment" was proposed as ...

...an opening up of access to high quality vocational education and training opportunities, so that training initiatives might more effectively satisfy both the needs of trainees and the needs of the local labour market¹.

...and while TAP courses were still "officially" taught, NEW-RIGHT ACCESS pilot projects started to be established around the country, between 1985 and 1986. This stage accounts for the development of ecological education under different policies for unemployed people, in the social context of dismantling the capitalist welfare-state and rising unemployment.

Firstly, I will focus on the nature of the participants in our courses: between 1985 and 1987, all the participants were long term unemployed living on the "dole" or domestic benefit, under policies which were affected by the transition from a welfare state into a free-market society under the Fourth Labour Government, influenced by the New Right:

The New Right, however, is concerned to alter the

¹ Labour Department, 1986. p. 44

fundamental nature of the welfare state, from an institution that creates the conditions for social solidarity through a de-commodified social wage to an institution which ensures the commodification of labour. The latter is achieved by providing minimal state support for those trapped by illness or unemployment¹.

I would also add that many unemployed participants were also trapped by New Zealand violence: state violence and social violence. A generalized lack of family support and love, paternalistic dependence on the state, lack of identity and political passiveness. A fossilized system of education of schooling for submission which is a remain of colonial "nostalgia" and that -until recently- has legally permitted in the schools the physical punishment of children by their teachers: a violence not only authorized but glorified by many parents.

Learning activities of "Critical Analysis" in our courses revealed that *some* participants -Maori as well as Pakeha-, considered that teachers hitting the children with a cane was a "normal" practice; most of them rejected formal studying, did not like to be in a classroom, did not know how to take written notes and "hated" lectures. Many said that they did not continue their formal education towards secondary or tertiary levels because they considered university as "useless" and "for the rich". The majority of the participants were adults aged 15 years or more with a background of overlong-term registered "unemployed" and were paid the

¹ Lauder, The New Right and Educational Policy in New Zealand, p.5

"Dole" by the Labour Department. According to the standards of the International Labour Organization, "the unemployed" were those adults that during the "survey reference week" were without a paid job or were available for work, but:

...(a) had actively looked for work in the past four weeks ending with the reference week, or (b) had a new job to start within four weeks¹.

Some other participants received from the Department of Social Welfare, a "Domestic Benefit" for their "personal or family responsibilities such as unpaid housework and child care"; while few others, -being "permanently unable to work due to physical or mental handicaps,..."-, were paid a "Sickness Benefit". These people are considered by the Statistical figures... "Persons Not in the Labour Force"; that means, to be living the paradoxical condition of: "Any person who is neither employed nor unemployed..."², but who live instead in a kind of social limbo.

Once they were selected for a TAP course and enrolled as Polytechnic "students", the "Unemployed" people would be paid an amount of money higher than the "dole", named: "Training Allowances". Others, as the "Persons Not in Labour Force", would continue receiving the Domestic Purposes Benefit or the Sickness Benefit. This amount varied according to the individual case. Also

¹ Department of Statistics, The New Zealand Labour Force, 1986., p. 34

² Opus cit., p. 34

-while they were attending the course- they would be paid "Transport Allowances" and if they came from another town, and have to rent a flat, they would also be paid for accomodation and for transport. I thought that all these payments were a reward for becoming "students" that is, "numbers out" of the "unemployment statistical figures" that started to be very embarrassing for the government that year.

The social-economic background of near 200 participants in our courses, was also highly diverse. Only a minority were born of parents with professions or business; most of the participants were born in urban environments as children of the "white" working class; some were born and raised in rural environments, being children of "white pakeha" farmers. Few participants were residents in New Zealand that came from other countries, specially Germans, and -still fewer-, were Maori. The Maori participants -with only few exceptions- did not know their parents and relatives or to which tribe did they belonged to, because they were separated from their families in their early childhood to be adopted for foster parents, far from their place of birth. With few exceptions-, they could not speak Maori fluently or did not have contact with Maori culture and traditions. We focused on multi-cultural values, and -with the incorporation of Maori culture, language and traditions in our curriculum-, it grew a motivation for Maori participants to rediscover their tribal roots. For

some the course was an opportunity -for the first time in their lives-, to appreciate Maori values.

Their ages varied considerably: from 15 to 60 years old, being the average between 20 and 40 years. Their educational level also varied significantly: illiterate people would be in the same group learning with people with tertiary levels of education. One third of the total number of participants, were totally or partially illiterate; those with illiteracy problems -if they wished so-, would have special sessions with specialists on "reading and writing skills" at the Polytechnic; besides -working in small teams-, the "literate" people supported the "illiterate" and both supported each other, to overcome these differences.

The majority of the participants had a very clear distinction between "Work" (self-decided and self-directed activity with "no boss" involved, enjoyable, satisfying and rewarding on a personal level) and "Job" (paid salary, hierarchically directed and decided, vertically structured and decided by a "boss", non-enjoyable, non-satisfying and non-rewarding on a personal level). For the majority of them, the experiences of "looking for a job" was a permanent frustrating exploration around the country, always changing through different unsatisfactory jobs and bosses. Most of the participants had a high sense of critical rejection of any jobs of a technological and industrial nature. This

was also accompanied with a deep rejection to any form of authority or hierarchy and a general critical attitude towards "the government". Initially, I could not understand the nature of their criticism against the government because in the "Third World" the governments are not as generous as the New Zealand one, paying "doles" or "benefits" to people that do not belong to the minority "rich".

On the contrary; in Venezuela, we -the children of the "working class"-, have only three options:

- 1) to study -thanks to the "sacrifice" of our struggling modest families until we graduate from university and get a title, and work professionally afterwards, hard and without stoping.
- 2) to win the lottery or at the horse-races or,
- 3) to become a beggar, a drug trafficker or a thief.

In New Zealand I started to understand that some unemployed people were under pressure because of their difficulties dealing with "government bureaucrats" or because of the difficult process of becoming personally incorporated and maintained as a codified number into the complicated computerized system of the Labour Department; or because they had to be constantly monitored through reports and interviews; or because there were frequent delays of one day or two in the "regular payments" of their "doles" which as a consequence, created "regular

conflicts" with their "landlords".

In relationship with their families, some participants had enjoyed a relative balanced childhood, some had a high degree of self-confidence, self-determination and some had leadership qualities. Other participants had suffered in their childhood parental violence including verbal, physical and sexual abuse and some had been under long term physical and mental stress. It was a common case that their parents did not care for them, economically support them or protect them. One out of twenty had been a victim in their childhood of adult violence, being brutally assaulted by their own parents: more frequently by an alcoholic father rather than by the mother. Some cases were horrifying; a participant had seen the father throwing a baby-brother against a wall, making the baby a permanent physically and mentally handicapped. Other participant had seen the alcoholic father punching and kicking the mother and the little children for one hour. Some times it was necessary to refer individual cases to special therapeutic and counselling services for Polytechnic students.

Some participants were chronic smokers, some were alcoholics and others had been drug users for many years. While some were highly confident in themselves, some were extremely shy and reserved; occasionally, the levels of self-confidence and self-esteem in one or two participants were so low that they could no speak to

others without stuttering, avoiding eye-contact, lowering the tone of the voice to almost inaudible levels, or developing red spots in their faces and necks. A minority had attempted suicide or had abortions shortly before the course started and few had been confined to psychiatric hospitals or sent to jail for robbery, assault, rape, or "manslaughter".

The general tendency of the participants to shift flats, neighbourhoods, cities and regions, was remarkable: the complexity of reasons behind this migratory tendency and their spacial and temporal instability could be a subject of research in itself. While some had leave their homes in order "to be independent" of their families they had become dependent of the state as a patriarchal substitution of the "father". A high number of participants had to leave their family home, forced by the circumstances at the age of sixteen; once they became registered as "unemployed" in the Labour Department, they started a particular lifestyle of a nomadic tendency: sharing flats with five or more young people, changing flats or houses as frequently as twice or more times a month, shifting to different towns or cities or moving north or south in search for casual jobs, maybe in search for themselves or maybe for the fun of it. In many cases, their only property would be a bag of second hand clothing. The general instability of the New Zealand deregulated economy that forced people to shift from isolated rural areas into the cities had

the opposite effect on some participants whom -after the course-, would like to shift to isolated rural areas. They were in search for a "living from the land" situation, maybe sharing expenses with others and relying on a simple, humble but "healthy" life-style. However, in the "Sustainable Productive Ecosystems" course -beyond all those differences and coincidences-, what all the participants had in common, was their personal need to learn from Nature and to become themselves.

Five "SPECS" courses were accomplished in a continuous process of positive achievements, growth and expansion. During those 5 courses, the relationship with the staff of Labour Department grew in cooperation, notwithstanding that we had many arguments related with the bureaucratic administration procedures. In general, Labour Department officers under TAP policies, were cooperative, had a very positive attitude and did not interfere with our internal decisions; they used to have lunch with us, to be with us in ceremonies of welcoming and farewell, to buy vegetables in our "Open Days" and to solve difficulties together, as they happened.

It is true that, from the administration viewpoint we had to accept their formalities and rules: interviewing and selecting "the trainees"; keep numbers and attendances under permanent control (minimum, optimum, maximum); keep separate registers, separate objectives and contents of learning for each "level".

Although in the everyday practice, within our internal organization, levels or "knowing more than the others" did not exist, but a continuous flowing of learning activities shared between participants. The courses focused on learning, not on teaching; on planning, administrating and developing practical actions; on individuals selecting their personal aims and objectives and teams selecting their own collective aims and objectives; on participating, solving problems and deciding by consensus in small teams which occasionally met together. The total group, internally organized in small teams of two to five people, had no more than twenty participants in total, "tutors" included. The collective learning activities were sometimes organized in couples or in small teams of three, four or five people. Each team was considered independent or autonomous in developing their own "pilot projects" and deciding on their own learning process; they were based on rotational tasks and leadership; they -individually-, judged by themselves to which extent they had achieve their own objectives; they practised critical analysis according to which nobody can evaluate, judge or rise criticism in the absence of the other person or persons involved; on individual awareness; on solving problems and conflicts between the participants; on internal agreements without hierarchical protectionism; on collective action for change.

After four or five weeks of introduction and

structured time tables, the new participants organized in "responsible teams", collectively started to plan for themselves and decided why, who, what, when and how to learn. Each individual will choose an "individual projects" to be shared with others, if the person wanted. Some team activities combined people of different "educational levels", mutually facilitating learning processes; they rotated to attend "Tutors meetings" with Ivonne and I. They also attended "Trust meetings" and decided on how to administrate the "Recovering Waste Land Project" as well as on how to better spend the course budget for the projects. Participants were welcomed to modify the original design with new, creative ideas and to build their own projects in the practice; they were encouraged to be "teachers" and to develop "teaching" and communication skills; all we were responsible for the general maintenance and finally, some started to develop their own Pilot Projects in the community.

The participants were empowered to decide on the aims, objectives, contents and methods of learning of the course; to plan the course activities in time and space within the limits of the budget; to take collective decisions about the orientation of the course curriculum; to conceive the creative design of the land and the environment and to organize themselves in responsible teams for pilot projects. Participants were encouraged to talk and were invited to discuss, to propose and to decide. Participants in the "advanced" levels started to

facilitate learning processes of the "introductory" courses through a "peer" system of mutual support. They organized public seminars, workshops and exhibitions open to general public and they started to explain ecological principles to other people.

The process of empowering adults was going to bring up a myriad of individual ideological expressions of the most diverse nature: social, cultural, political and religious. In Venezuela the expression of ideas emphasized on collective aims, but without clear conscience that we all were using sexist language. The first time I was confronted by feminists participants, I was explaining a method of composting to the group, using a Venezuelan teaching poster that I had translated from spanish into english. The women asked, if I had noticed that the poster reads "Compost: Humus Made by Men" and that it represents "a man" making a compost pile. They said that in our group the women worked harder than the men in making compost: and it was true. Although in some courses "radical feminists" would be sitting side by side with "patriarchal-minded" men and -in the discussions-, the tensions and conflicts between them became evident.

The ideological background of the participants was highly diverse and rich in contrasts: some of them had atheist-materialist backgrounds and some had been trained in radical "Marxist Structural Analysis"; some were Masons and some were inclined towards diverse forms of

"spirituality", "mysticism" and ritualism. For example, some people were practitioners of meditation, mantras or prayers according to "New Age", "Yoga", "Karate" and "Tai Chi"; they would be learning and working side by side with fundamentalist religious people that think their religion is the only truly one; such would be faithful people of the most varied traditional religions were: Buddhist, Mohammedan, Hare Krishna, Mormons and Taoists. There were also fundamental Christians who thought that their own particular church is "correct" and "true" while the other Christian churches are "wrong" and "false". Participants of the many Christian churches -too many to be counted- included "Fundamentalist Christians" and "New Born" Christians. Also some people were "skin heads", some were "punks" and some were members of bike-gangs. However this diversity, the inter-action between the people was of mutual respect for the other.

The complexity of practical team-actions required more internal information; hence, the participants decided that an internal newsletter was necessary and started to print "The Grapevine". The sense of belonging to the land grew and the effects in the environment started to be noticeable. Very soon, visitors and the media, started to come and see the two model-sites at Opawa and Dyers Road which included permanent exhibits of 15 different non-polluting methods of food growing. In "Open Days" the visitors were welcomed by the participants for guided visits through the gardens and

were encouraged to buy vegetables and with that money we could buy more books beyond the limits of the budget. The comments in the "Visitors Book" were very encouraging. Maori tutors, incorporated Maori culture, language, traditions and values in SPECS courses and the "Tangata Whenua" of South Island blessed Opawa land according to ancient customs. Also we started a wide regional, national and international network, keeping in permanent exchange and cooperation with many educational and environmental organizations. After SPECS courses, eight participants planned and advertised their own new courses to be taught by themselves and seven of them became "official tutors" of the Christchurch Polytechnic.

We started to experience a process of growth and expansion. The demand for the courses was encouraging and past participants wanted to continue their learning process. The way we could convince the Labour Department to let them stay was by establishing an "advanced" level and reducing each level to fifteen weeks instead of 20. The demand for courses continued; hence, we had to extend the courses still to a "second" and a "third" "levels", until we reached the equivalent to a year of 45 weeks full-time course. The following table, summarize these processes of growth and expansion on time. It is noticeable the increasing number of women participants:

Table 4

GROWTH WITHIN TRAINING ASSISTANCE PROGRAMMES-POLICIES FOR
UNEMPLOYED PEOPLE

Sustainable Productive Ecosystems Courses

(Nov. 1985-March 1987)

11-11-85 -> 11-04-86:			
15 participants	"intro level"	6 female	9 male
2 participants	"tutors"	2 female	
--		--	--
Total: 17		8	9

21-04-86 -> 11-07-86:			
15 participants	"intro level"	6 female	9 male
6 participants	"second level"	2 female	4 male
4 participants	"tutors"	3 female	1 male
--		--	--
Total: 25		11	14

28-07-86 -> 07-11-86:			
15 participants	"intro level"	6 female	9 male
14 participants	"advanced level"	4 female	10 male
3 participants	"tutors"	3 female	
--		--	--
Total: 32		13	19

17-11-86 -> 13-03-87:			
15 participants	"intro level"	9 female	6 male
15 participants	"advanced level"	8 female	7 male
4 participants	"tutors"	3 female	1 male
--		--	--
Total: 34		20	14

30-03-87 -> 10-07-87:			
17 participants	"intro level"	10 female	7 male
14 participants	"level two"	8 female	6 male
6 participants	"level three"	4 female	2 male
8 participant	tutor	6 female	2 male
--		--	--
Total: 35		28	17

TOTAL PARTICIPANTS:			145
---------------------	--	--	-----

Itchurch
ronmental
eational
st
ents...



Dyers
Road:
Before...
1985



and
After...
1988

"Recovering waste land" educational project:
to provide an ecological learning centre
for the community.

1984



We didn't have a classroom or any shelter. A \$100⁰⁰ Railway Carriage was our first refuge.

1988



and as it looks today



1988

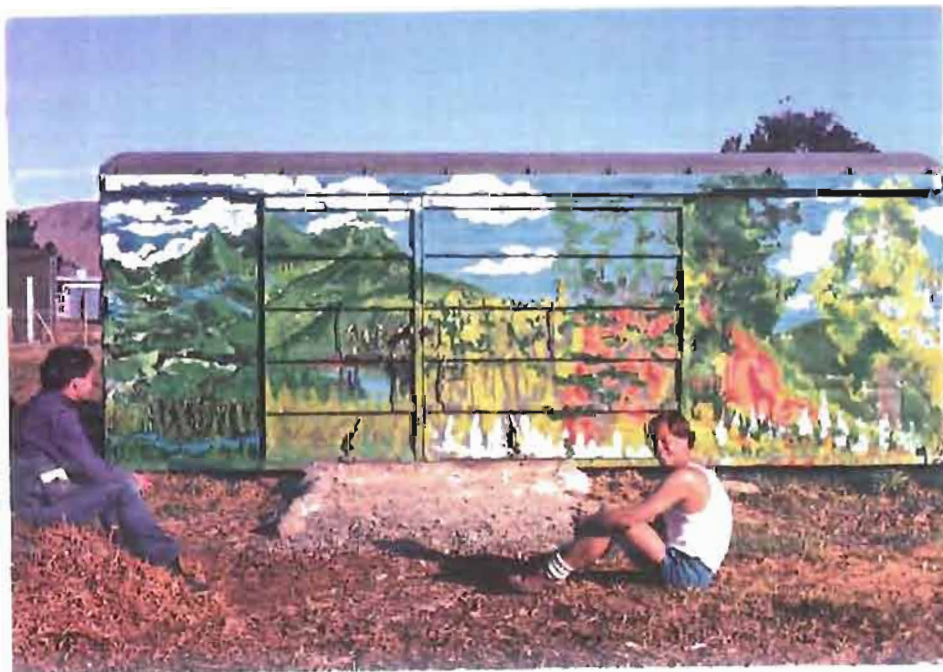


now, we use it as a shed; but many meetings and lectures were given under its roof.



and it is also
place
to keep
the
Tractor.

← Our only
shelter
as it
looked in
1987...



and as it is
today: one
of our maori
students -
Hemi-Umu
decorated
it with an
inspiring
motive:
green
mountains.

and they look like the Port Hills of Christchurch
used to be, covered with native forest,
before humans came to live here.
Hemi is a very talented artist. . . .



posts
in
place
...



Students started the
fencing process in
1987...

fence
and
gates
and
Jerusalem
Artichokes
delicious
crop of
high
nutritional
value....



Aquatic eco-system





Before



After





We
started this
native garden
in 1986
←



and natives were planted
all along the fence.
We could see
the Metropolitan
Transfer Station
from this angle:
the cabbage-trees
and flaxes, as
they were
two years ago . . .
←



and as they are
today . . .
1988
←



1986...



1988...



Recovering

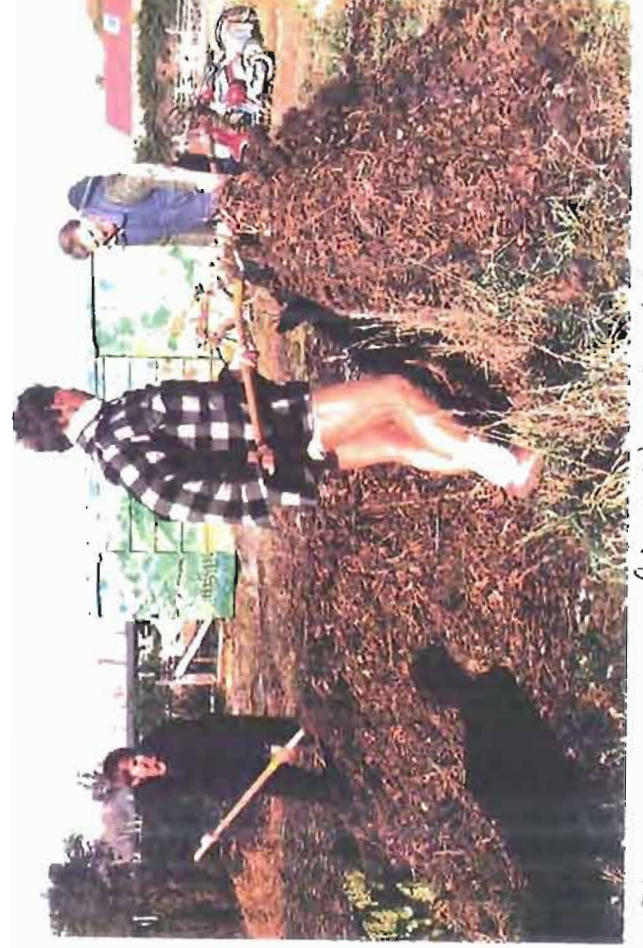
Recovering



Recovering



of original material to the



Soie that originated is → The more alive the Soie,



just
poor soil
and weeds
and
desolation

←
1986

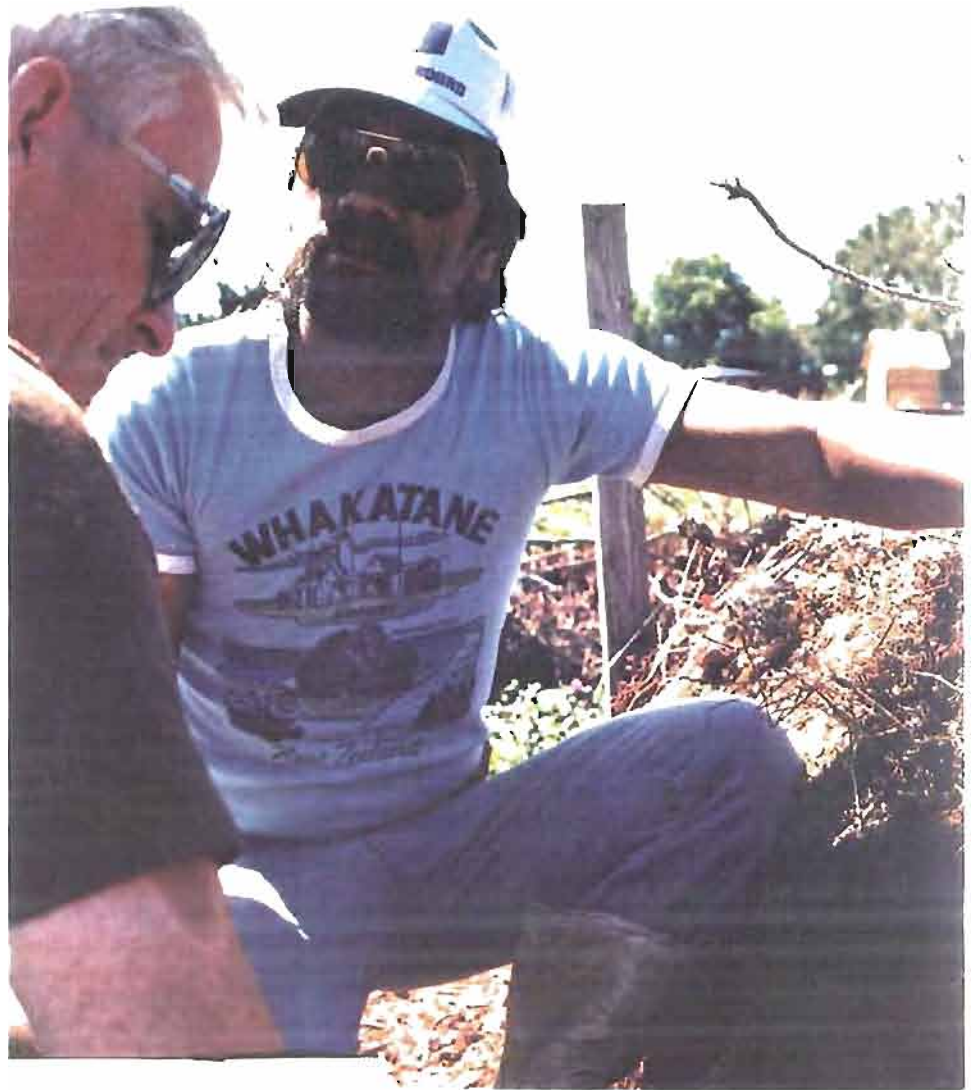


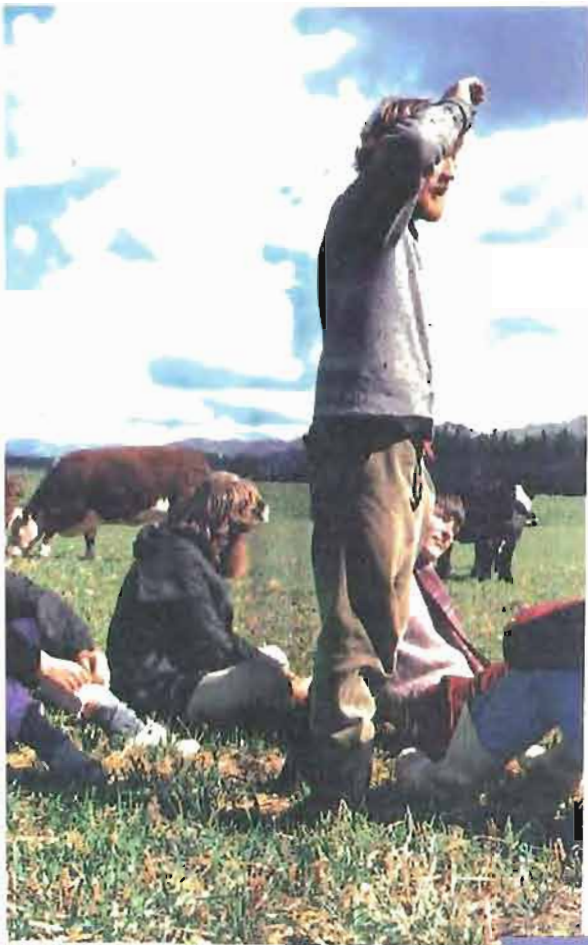
Human
Energy:

1986
1987

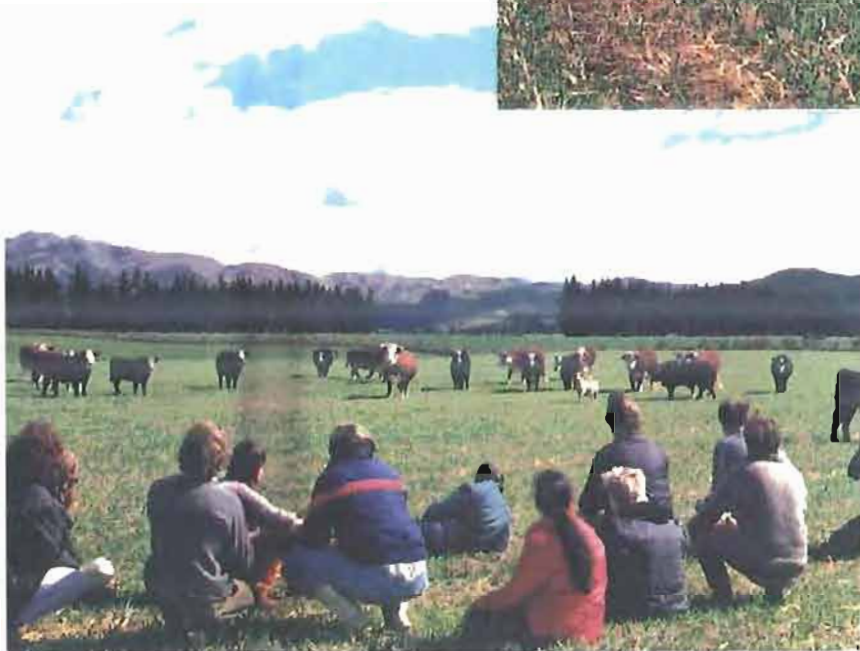


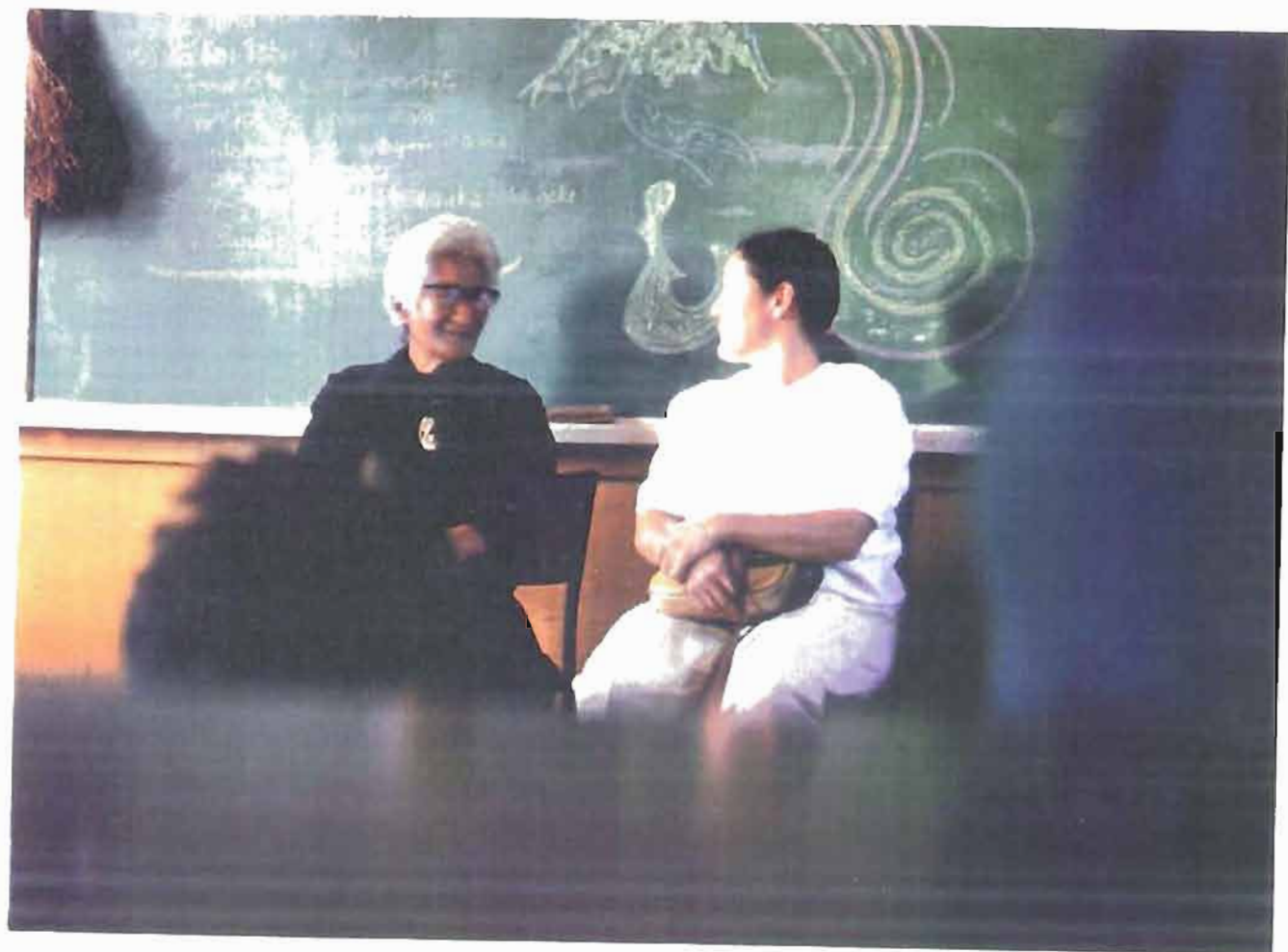
1988





Field Trips









The success of the "Sustainable Productive ECO Systems" SPECS courses could be measured in terms of participation: in two years and from a total of 145 participants, three withdrew in from the 5 courses for reasons beyond the control of the individuals. The educational process became well known by the community not only in Christchurch but also around the country and overseas. It caught the attention of the media and many encouraging articles and interviews were published; the demands for visiting the gardens continued and I started to receive letters from overseas asking for more information.

At that point, it started the tension with the New Right-ACCESS policy. Again, in April 1987 the government changed all the training schemes for the unemployed people dismantling the "temporary" system of TAP courses and introducing "permanent" administrative reforms for the implementation of the "new" NEW RIGHT-ACCESS policy (NR-A). At the same time in three years of Labour Government, the process of deregulation of the New Zealand economy towards a "free-market" society have had a dramatic effect in the growth of unemployment, as seen in the following table:¹

¹ Source: "Key Statistics. December 1989." Department of Statistics. Wellington, New Zealand.

Table 5

Unemployment Rate 1985-1988

Registered unemployed, employees on special work and under "job creation" programmes:		
<hr/>		
When I started		When I finished
TAP policy		ACCESS policy
November 1985.		15 July 1988.
=====		=====
53,180		120,941
 "Unemployment Rate"		
(UR) : 3.8.		(UR) : 6.1.

On the 30-3-87, before a new course started, we received instructions that all the "TAP tutors" had to attend a meeting on the 26th with two members of the staff of the Labour Department. This people had been specially trained in Wellington on how to "instruct" us - "the tutors"- in the ACCESS policy, which was defined as "...a Government commitment". In that meeting with about fifty or more tutors, we were told about the origin of the ACCESS policy:

The discussion paper *Skills for Young People* brought various themes and suggestions for change canvased at the Employment Promotion Conference, in the report of the Scott Committee on Transition Education and in earlier reviews of training programmes for young people. The paper proposed a new concept known as ACCESS, based on an active approach to transition education and training which would better equip young people for life, including working life¹.

I understood that we were being introduced into the old philosophy of "education as a capital investment" with the use of a "new" computerized language of: "negotiation", "training providers", "disadvantage points", "targeting points", "accountability", "enhanced job readiness", "labour market orientation" and -very important-, "inputs" and "outcomes". Soon the new language became fashionable between "tutors", even those that -until that moment- I had considered as "educators". However, at that time, I was not aware that the "new" language was an ideological expression of the free-marketeers of the "New Right". Also in that meeting we were given instructions on what we had to do in order to

¹ Labour Department, 1986: 44

fit people within the new computerized system since the "Training objectives" were going to be changed into codes: FAT (Further ACCESS training), FED (Further Education Training), EWR (Enhanced Work Readiness). The tutors did not know that soon after that session, that they had "to enhance" themselves in order to continue working under the "new free-marketeers administration" of the NEW-RIGHT ACCESS.

At that point of the meeting I realized that the complexity and richness of SPECS aims and objectives - decided individually and collectively in a dynamic process of learning-, was going to be reduced to behavioural, mechanic and reductionistic "free-market" ideology. The bold objectives of ACCESS were known as: "Course Objective One: Placed in Employment"; "Course Objective Two: Undertaking Further Training" and "Course Objective Three: Enhanced Work Readiness". Hence, when the staff of the Labour Department started to give us instructions on how to base our new ACCESS course proposals on behavioral principles, I could not believe my ears and looked around the room without understanding the passivity of all those tutors listening without commenting or reacting to such an invasion of our work. There, two bureaucrats were telling us what psychological basis we had to compulsory use in our courses as the foundations for "better training" for getting jobs, with no ethics involved, just numbers and codes. I stood up and said in front of the group that I would never use

principles of behavioral psychology and that the proposal sounded mechanistic and manipulative; and I went further, with a Venezuelan sense of humour into comparing the proposal of "inputs" and "outcomes" with the industrial manufacture of sausages. People laughed and, after a moment of silence, the two functionaries continued explaining the NEW-RIGHT ACCESS rules on what we *must* do if we wanted to continue working, since...

...Training proposals *must* provide specific skills training, be tuned to the local labour market and assist trainees to move into jobs or further education and training¹.

With that compulsory *must* they -finally- invited us to write our new ACCESS proposals - following "the new" guidelines- and to go to a meeting in June with the new authorities or the Regional ACCESS Council: REAC.

Most councils have 8 members: 2 representing employers, 2 representing trade unions, 1 representative for Maori people, 1 for women, 1 for Pacific Islanders (where appropriate), and 1 or 2 representing the wider community².

The meeting was held in June in the REAC headquarters and there, about thirty or more potential "training providers" -myself included-, were standing in a packed room; everybody was familiar since many of them were my friends, one woman had been participant in three SPECS courses and I knew the rest of them. The patriarchal "chairman", a successful "business-man" with more than a mansion in the Cashmere Hills, explained to

¹ Department of Labour. Promotional Brochure: ACCESS. A New Way To Train, First Issue, January 1987

² Department of Labour, Ibid.

us the "new training policy" -which in the reality was old behavioural thought mixed with "free-market" rules- of the "new" NEW RIGHT-ACCESS. His indoctrinating speech culminated with the command: *"Now, you will have to compete between yourselves"*.

He was "the boss". Nobody dared to say a word; and what was happening in that room, was happening everywhere in any area of the New Zealand administration dominated by the New Right since:

Corporate and business leaders are prominent on the boards of trustees of academic institutions and foundations, where they inevitably use their influence to perpetuate a value system consistent with corporate interests¹.

His executive mandate made all my years of education for "cooperation" and not for "competition" totally useless and his mechanical language, computer-style, started to be very boring: concepts of "training", "training providers" "training proposals" and "trainees" were combined sometimes with those of "outcomes", "disadvantage points" and "accountability".

The manipulated concept of "training for the disadvantaged" was overwhelming and I understood that the competition between us -the "training providers"-, was going to be measured according to two simple quantifications that were expressed to us, as simple logic axioms:

¹ Capra, F. Opus cit., p. 232

1) "Before the course starts: the more "disadvantage points" is achieved in the selection of "trainees", the more money you get for your course".

2. "After the course: the numbers of people placed in jobs or in "further education and training" would be the guarantee that your course had a "positive" effect -or not-, on the "enhanced work readiness" and "skills for work" of your "trainees".

Hence, according to these two axioms, the REAC had enough criteria to decide if the course was "good" or "bad"; all depending on to "...achieve the agreed outcomes"¹ -or not-: in the last case, the course *must* be "eliminated". The second axiom means that after the course the tutors would have -shamefully-, to behave themselves as efficient employment agencies, acting as spies for controlling the life and movements of the ex-participants; asking them questions about what are they doing (or not doing) and what are they going to do; and all that information has to be passed to the authorities for them to feed the data into their computerized national system. The above mediocrity of the ACCESS policy was explained by the "chairman" in detail as a revelation, like a "truth" and as a dogma with no margin for dissent; I started to feel that, if somebody in that room -for example myself- dare to argue his logic, that person would be considered immediately as a "deviant". I

¹ Department of Labour. Promotional Brochure: ACCESS. A New Way To Train, First Issue, January 1987

was there again within the well-known patriarchal hierarchical situation of the "big man" over the "small men and women": "us".

The people in that room knew that we were going to be rigorously selected in order to be the "new trainer providers" and I started to understand progressively the conceptual framework of his ideological manipulation: what he required from us was to accept to play the behavioral game of "Systems Theory" which considers education as a three parts machine, made of pieces which "function" is to produce a final product, being the three parts as follows:

...the input, that which enters the system to be processed to bring about the desired results: throughput, or the heart of the system where the inputs are processed in an orderly fashion; and output, or the end result of the inputs being processed. The systems approach includes a flow chart which visually represents the structure of the subsystems, including elements of directionality, time allotment and decision points¹.

This modality of behavioral education has been adopted and sponsored by New Right ideologists because it helps to perpetuate their own privileged positions of power and control. According to the New Right "systems approach" the "trainees" are "inputs" which are processed by the "training course" after which they become "the end result"; this product must be the ultimate "output": that means, well-adapted, well-behaved, well-efficient and non-critical people to be fitted within the productive machine-gear of capitalism. If the "product" (the

¹ Elias & Merriam, Opus cit., Chapter IV p.92

"trainee") does not pass the examination, then the machine (the course) must be destroyed: end of the production line. The New Right "Systems Theory" had already started already to be imposed over the whole educational system of New Zealand by some invisible ideologists in Wellington, brain-washed by the "accountability movement", since the real motive of the government was to get a political public image as "saviours" of the taxpayers money:

The taxpayer's concern with making schools cost effective, the inevitable evaluations which accompany such a demand, the need to effectively reach the disadvantage groups...¹

This is how the NEW-RIGHT ACCESS ideology started to be applied through the new administration system in Canterbury. At that time I was not aware of the New Right, nor did I have the capacity to analyse the ACCESS policy within the overall situation of the New Zealand and international New Right context. I was not intellectually prepared to refute arguments and -being "institutionalized" myself and trapped as a loyal "tutor" of Special Programmes of the Christchurch Polytechnic-, anything I could say or do in that REAC meeting could negatively compromise the image of the institution to which "I belonged to". I knew that my comments -and I was not sure of what I was going to say-, would jeopardise not only the future "application for funding" of "my" Department of Special Programmes but the work and struggles that Yvonne Steinemman and I have had in order

¹ Elias & Merriam, Opus cit., p. 90

to set up our courses. My institutional "loyalty" to the Christchurch Polytechnic - combined with five years of "self-training" to imitate the neutral expressions of the "cold" english-pakeha around me-, controlled my initial South American impulse. I was to refute the behavioral, reductionistic and mechanic logic of "accountability" of the "chairman" that made me feel intellectually insulted. On the contrary, the result was that -instead of reacting impulsively in rebellious confrontation to the "free-market" command of this NEW-RIGHT ACCESS "Businessman-Chairman" and let my Latin American proudness flow-, I kept silent, moderate and neutral like everybody else in that room: "british looking". Nevertheless, that day I understood that I would not be under ACCESS command for longer and decided to fulfil the formal and bureaucratic demands while continuing the ecological learning process intact as long as possible; but also I knew that the ideological contradiction with ACCESS would continue and eventually would lead to conflict.

d) Stage 4. Reaction (September-October, 1987)

This stage accounts the conflict with the patriarchal hierarchy of the NEW RIGHT-ACCESS policy, which was officially adopted by the Christchurch Polytechnic in March 1987. In September 1987 the political campaign against the SPECS courses reached a crisis of national political dimensions manipulated through the media and, on the 23 of October of the same year, a public political attack came from the "Beehive" in Wellington: not only

from the government but from the opposition.

A 20 weeks SPECS course proposal had been accepted by the new Canterbury Regional Employment ACCESS Council (REAC), starting on the 31-8-87 until the 5 of February 1988. Sixteen "new" participants and 19 "past" participants had already organized themselves in teams and had started a processes of critical analysis and evaluation when Yvonne and I received a note from our HODS that two functionaries of the Labour Department appointed by the Regional Employment Access Council were going to visit "Opawa gardens" for an "evaluation" of the course and to "be cooperative with them". This was the first time since I started to work in the Polytechnic that an authoritarian modality of control interfere with our educational work and I started to feel that something was wrong.

The visit of two men, dressed as typical bureaucrats, took fifteen minutes talking with Yvonne and I in the office and ten minutes discussing with the participants. Their questions and the conversation revealed again the same boring language of "training", "trainees", "outcomes" and "accountability". The activities of "Critical Analysis" of the participants that day, reflected their personal tensions and conflicts with "the system"; many of them were very upset because that particular week the Labour Department had not pay on time their "training allowances" and the participants -in

turn- could not pay their weekly rent, debts, transport, or buy their food. Besides, the presence in the classroom of the two functionaries representing -and looking like- "the government" created still a more tense atmosphere in the group and specially, for those participants who had previously attended courses on Marxist "radical structural analysis" with a Catholic priest in Christchurch-, months before they became participants of the course.

"Anti-bureaucratic" feelings of the participants were expressed during the ten minutes interview with the two men of the Labour Department; they were not interested at all in the achievements of the course aims and objectives but in the achievements of their own "free-market objectives". They asked us information about the "trainees" attending our courses because they "knew" that some of them had tertiary levels of education -that means- that they were "privileged" and did not have the right to use the "taxpayer's money". The two men wanted to know what past "trainees" were doing after the course: a) Were they still unemployed?. b) Were they "students" in other ACCESS courses" or c) Were they students in other courses other than ACCESS?. I was feeling very embarrassed by having to perform this sort of "following up" people with questions about their personal lives that -for them was data to be fed into a computerized national system of information about unemployed people. Then, I had to send two hundred questionnaires to all the people

that had been participants in our courses explaining the situation and asking for their comments about the course. The HOD of Special Programmes had suggested to Yvonne and I to be "cooperative" with these "evaluators"; hence, I went to the Labour Department to meet with one of the two men who came to "evaluate" the course in order to analyse together the answers to the questionnaires and the comments of past participants about the courses. Since the functionary was not there, I left the envelope with the questionnaires addressed to him with the receptionist. That day it was Monday, the 28-9-87. On Tuesday the 30-9-87, the Head of Department call me to say that some journalists wanted to interview me about some news published that day named: "*Training Doubts Unearthed*". I did not know what the HOD was talking about until I read that a "Labour Department evaluation report" on the SPECS course had been sent to the Canterbury Regional Employment ACCESS Council and to the media, although I did not know the existence of that "evaluation report". The article -which was written with the typical "New Right style"~, was a plea to "save" the tax payers money badly spent in a course that was not "training the trainees" for a job and to love the system, but on the contrary:

However, a nagging doubt is that they also pick up very negative attitudes to the "system" and do not come away from the course with any increased desire to play a part in the provision of horticultural produce for the population or for export. ...it was possible that criticisms that the course taught trainees to be against 'the system' could stem from the content about using

natural products instead of pesticides or herbicides¹.

I was told by "my" two Heads of Department not to talk with the media before knowing the facts and the content of the "evaluation" report of the Labour Department. She asked for a copy of the document which, line after line, was a succession of false and biased statements:

...it seems surprising that ACCESS was used for so long by these well educated people who could quite easily have gained qualifications/skills through their own means

It strikes me that is not possible to get an objective insight into the outcomes from the trainers because they do not think in terms of 'the Objectives of ACCESS'- to them we are only the providers of finance for their scheme, and a nuisance, in that we question the basis of the courses.

A nagging doubt is that they also pick up very negative attitudes to the 'system' ...it does not appear to be meeting the criteria of the ACCESS Council.

Immediately after the above article was published, many people started to write "Letters to the Editor" of "The Press" in defense of the SPECS course but this public reaction of support was followed by a still more fierce political campaign through the media against the course.

Articles were written on behalf of the free-marketeers -now glorified and elevated to the category of saviours of the taxpayers money-, such as the one entitled: *"ACCESS Trainees Comments Fuels Dept Concerns"*²

¹ "The Press": September 30, 1987., p. 9

² By journalist Sue Lancaster: The Press, October 14, 1987.

although few days later, an article revealed that the beginning of New Right policies on "unemployment" being implemented in New Zealand-, were linked with the same New Right free-market policies already happening in Britain:

The recent suggestion by the Minister of Employment, Mr. Goff, that dole payments for young unemployed people could be cut next year, echoes the debate over welfare dependence being conducted in Britain at present¹.

But the New Right debate of the "free-marketeers" over the possibility to eliminate or, at least, to constrict the welfare system, had started the year before. Followed by the first meeting in June of 1986 of the New Zealand Center of Independent Studies -which is the vehicle for ideological penetration of the New Right thought in this country-, many arguments followed, focusing on the welfare system:

Dr. David Band told the conference, organized by the privately funded New Zealand Centre for Independent Studies, that the Welfare State relied on coercive redistribution of wealth through the tax system. It statified altruism by reducing surplus income and feeding resentment among tax payers toward beneficiaries. '...A society that can care for its less fortunate citizens only by redistributing the proceeds of expropriation is morally bankrupt. We live in such a society' Dr. Band said².

It is possible that -what Dr. Band incorrectly defines as "statified"-, means "state altruism". And for many years, as Dr. Band did, many visitors have come to New Zealand as "guest speakers" invited by the "financial

¹ The Press: From Welfare To The Work Ethic, 21 October, 1987

² See: "Welfare State coercive" and "morally bankrupt" in "The Press": 10-11-87

global New Right"; while other trips were for few selected officials and political leaders to go overseas to be trained -and indoctrinated- in the principles of anarchic capitalism¹. This was a precondition for the free-market "revolution" in New Zealand to start -not as an isolated act-but as a very well organized political movement of premeditated actions originated at international levels. In the process, the New Zealand New Right have demonstrated that it is more integrated and more ideologically and strategically unified than the Labour and National parties.

For example: maybe is not a coincidence that -when the attack on our course started-, four issues were being published in the newspapers, at the same time in the same year: a) the political campaign in favour of the "saviours" of the "tax payer's money"; b) the justification for dismantling the welfare state; c) the message that the "free-market will solve unemployment"; and d) the campaign against the "Sustainable Productive Ecosystems Course". This campaign through the media must be seen in the context of 1987 that was the year when the New Right "revolution" in New Zealand had to move cautiously at political, legislative and administrative levels of the Fourth Labour Government:

¹ See Jesson, B. Fragments of Labour, 1989., p. 60

On a legislative level the New Right ideologists were trying -and achieving-, to eliminate the formal model of valid rules and "a priory" principles with specific ends and general categories; to introduce the first steps towards a New Right "model legislation" of rule-based individualism as a broad framework of the law and to achieve legislation towards decentralization and a pervasive state which let the free-market forces to rule the society. On a political level, the "financial-global" New Righters were also aiming to minimise the delegation of power by the state "in the public interest" to its agencies for economic and social welfare or for environmental interventionism. On an administrative level, for the implementation of the law it was convenient to give more power to local and regional government which boards of trustees, councils and committees would be lead by chairmen; they -in turn- must be "successful" business-men who will impose their own ideology of New Right selfishness and competition.

According to the New Right principle of "process orientation"¹, since the free-market determines the aggregation of the rational individual preferences, it will also determine a notion of the "Limited State". According to this notion, the state must be withdrawn from any social programmes and its only function is to protect exclusive, transferable and enforceable property

¹ See Schotter, Free market Economics, 1985

rights; the state is permitted to act only to detect and prevent theft, violence and deception and to save big companies of the injustice of having to pay taxes while cutting government expenditure in helping "the poor", because...

...we could save the taxpayers a great deal of money and hence reduce the degree to which their rights are violated in being taxed by having a negative income tax, paying all those below the minimum wage (plus allowances) their minimum wage (plus allowances) and ceasing all direct government services to the poor, pensioners and so on¹.

When the attack against the SPECS courses started, the New Right was in the process of dismantling the welfare system and in the process of electing new local authorities ideologically brain-washed by the "free-market" revolution. The "revolutionary" step of empowering the "free-marketeers" into government positions at high levels of decision-making, implied the "necessary attack" on any vestiges of the "old" "welfarism protectionism" of the "old" system that benefitted the "unemployed" and "the poor" at the expense of the "tax payers" money. It is for that reason that the political campaign of the "free-marketeers" through the media in the last five years have been mainly based on the public image of some politicians as the "saviours" of the "taxpayers money"; and that was precisely, the "hidden" message of the initial attack against the SPECS courses.

¹ Chipman, Liberty Justice and the Market , p. 13

Also in 1987, the "New Zealand-New Right revolution" had created an internal conflict in the process of dismantling the "old" bureaucratic system of the central government for giving the authority and power of decision to the new "committees", "councils" and "boards of trustees". The fact is that these "revolutionary" bodies have to be lead to "success" by a New Right thinker ideally a "chair-man" whom at the same time must be a "successful business-man". In the transition towards a truly New Right society, this bodies also had to include -as a necessary "democratic" concession-, the "balanced" and "democratic" representation of "the community", the Maori, the women and the unions. However, this new bodies -apparently democratic-, are not in contradiction with the New Right principles at all. On the one hand, it is true that the monetary thesis of Milton Friedman focuses not only on his criticism of the state bureaucracy but also on the critique of the unions, "the best-paid aristocrats of labour"¹. On the other hand, he not only disapproves of the beneficiaries of the welfare state but the politicians who pay themselves high salaries and live in comfort while talking demagogically about "equality".

According to M. Friedman this groups: the unions, the bureaucrats and the politicians and any "delegates" who claim to represent -in their individual persons-, the

¹ Green, Opus cit., p. 77

will of a particular collective (Maori, women)-, in the reality, have no real "social concerns" but on the contrary; their actions are totally selfish and motivated by their own self-interest; hence, they try to stop the free-market forces and to concentrate instead in regulating powers in favour of the governments. These new modalities of committees, boards of trustees and "mixed" councils sponsored by the Fourth Labour Government -mentioned above-, are an indication of the strong influence in this country of the principles of the New Right school of "Public Choice". This school pioneered by Gordon Tullock and James Buchanan¹, uses manipulative language about what the government "should" do instead of being direct and express their real commands on what the government **have** to do. Trying to sound polite, the "Public Choice" maintain: "... that government activity should be shifted into the market...", moved by the "profit motive", and that the "...structure of government should be reformed to improve its efficiency.." ².

For the "Public Choice" school the "profit motive" of the business-"man" must prevail in these "new" (New Right) "revolutionary" councils and boards of trustees, instead of a) the "vote motive" of the politicians; b) the "power motive" of the union leaders and c) the "my

¹ Green, The New Right. The Counterrevolution in Political Economic and Social Thought, p. 92

² Green, D.G., Opus cit. p 103

own salary motive" of the public bureaucrats pretending to serve the public although guided by their own selfish interests¹. The patriarchal-hierarchical system lead by a business-"man" of the "new" New Right in the 1987 Canterbury Regional Employment ACCESS Council, had a destructive effect not only in the SPECS course, but also in the cooperative relationship between educators. According to the new rules, it was compulsory for educators "to compete between themselves" for salary, position and a course budget -that means, they had to perform within a race for "money"-, if they wanted to continue working.

This ideological conflict raised by the New Right was reflected one year later in many meetings of adult educators discussing the important question: "To compete or to cooperate?". Nevertheless, the patriarchal hierarchical system of the "new" New Right authorities towards the "minimum-state" had also to start an internal battle for political power since the remains of the "old central government" were still in power. Two "big men" - the "old" and the "new"-, were now in conflict: the "old boss" on top of the many "sub-bosses" of the "old" Labour Department, used to have all the power of decision about finance of the courses for the unemployed people. But now, with the REAC, their authority, power and control was diminished. The internal conflict for power and

¹ Ibid, p. 99

control reached a climax in Otago, where the authorities of the Labour Department intensively opposed some decisions of the REAC Council.

At the same time the new belief in "competition" also aroused internal conflict for funding, frustration and rivalry, between the potential "training providers". The most surprising phenomena that year was that all the relationships between "institutionalized" people started to be based in what I will name "the New Zealand gossiping culture" according to which, two or more people criticise destructively somebody without that particular person being present to argue for her or himself. With the start of ACCESS the "NZ gossiping culture" reached a climax in 1987 and it has continued rising until today.

While these processes were happening all around the country, the tone of the "free-market" arguments against our SPECS courses continued in the Christchurch media. The defamatory campaign was -again- the job of the journalist Sue Lancaster who quoted phrases from three questionnaires -out of 200- that I had sent in September to the functionary of the Labour Department. Those questionnaires were going to be discussed between the two of us, and instead, finished in the hands of an unethical journalist: it has never been proved how she had access to that confidential information. For her destructive article, she based her arguments on the biased selection and quotation of three phrases in the questionnaires of

three participants -out of two hundred questionnaires-, whom, in her opinion, were "against the system". She did not quoted any comments of those participants with "positive" liberal-capitalist thought towards "the system" or those who had expressed comments "in favour of getting a job" after the course.

On the contrary; her argument became so mediocre that all her discussion started to be focused on **one** phrase of **one** of the participants who -previously to our course had been previously trained in Marxist radical-structural analysis by a "revolutionary" Catholic priest in Christchurch. Besides, the same participant was also attracted by esoteric mysticism and New Age thought. The result of this bizarre ideological mixture was a three lines comment about the "Gaia Hypothesis" of Jim E. Lovelock¹, a phrase praising humans as gods and an insult "against the system". The conclusive idea in her article was that I had brainwashed the "ACCESS Trainees...", "...against the system" during the "...controversial ACCESS organic gardening courses...". In the reality, what the participants wrote was not different to what Michael Jackson screams in his musical hit sponsored by the Transnational "Coca-Cola": "I am Bad". The tone of Sue Lancaster was to make people believe that the SPECS participants were like children and not adults with their own culture and their own political, religious and social

¹ See the critical analysis of this theory in Chapter Three, in: "Eco-Feminism"

ideas that they have very well formed in their minds many years before they became participants in SPECS.

In our courses "adult education" means that people feel confident in an environment of total freedom of expression and are able to talk about anything and any subject that the participants decide for themselves to select. I deeply respect freedom of expression -although I do not share- the many political positions and mystical beliefs and religions of the participants. For example, I have consistently and openly opposed the sexist nature and the religious tone of the GAIA hypothesis. Nevertheless, SPECS participants -being adults themselves, have their own opinions and beliefs and in our discussions we do not have necessarily to agree: the "Gaia Hypothesis" is one of the many theoretical frameworks which are critically analyzed by the participants in our courses. Immediately after the publication of Sue Lancaster defamatory article, the process of attack -and defence- of our courses continued and in the process, the articles often mentioned my name. The attack continued and -this time with overwhelming force-, from the highest political levels of the patriarchal hierarchy in New Zealand. The political campaign, culminated with the blatant declarations of two male politicians from their "Beehive" headquarters in Wellington.

These two men: Mr. Winston Peters, a spokesperson

for the National party -in opposition-and Mr. Goff, Minister of Employment of the Labour Party -in government-, decided -as the journalist Sue Lancaster did-, to manipulate the public opinion against our SPECS courses based exclusively on **one** particular phrase about the GAIA hypothesis of **one** of our participants. This happened on the 23 of October of 1987, an important date in New Zealand, because -for the first time in this country-, it was an agreement between "the Government" (Mr. Goff) and "the Opposition" (Mr. Peters): in the morning "The Press" of that day, Mr. Goff declared: *"Cosmos, Job Link Not seen"* and -in the afternoon in "The Star" the same day-, Mr. Peters did the same: *"Job View Not Ideal"*.

Both men were deciding the end of our courses in Christchurch. The defamatory process of the patriarchal hierarchy in Wellington of "punishing" two women doing their ecological educational work, was similar to the prosecutions of the Holy Office Inquisition of "Witch Hunting" in medieval times. This political campaign must be seen in the context of the pyramidal hierarchy from the bottom upwards:

superannuation — raising the age of eligibility; a variable age of retirement; testing for employment, income or assets; or a low universal payment with an income-tested supplement.

The Treasury supported the merger of the family benefit and Family Support, with assistance to those not able to meet the full costs of bringing up children.

Concern was expressed that the purchasing power of beneficiaries had been maintained, while that of workers had declined.

The papers tended to emphasise principles rather than specifics, and many of these principles were predictable.

In health, for example, the Treasury said the Government

selecting departmental heads — in the interests of accountability — and the privatisation of State-owned enterprises.

In economic management, the Treasury approved moves towards deregulation, but described the Residential Tenancy Act and the provision of conveyancing services by the Housing Corporation as "less than optimal interventions."

Among the other Labour initiatives to be questioned for their effect on business was the Fair Trading Act.

The criticism might well be two-way — the Treasury papers, while an encyclopaedia of Treasury views and principles, could hardly be fairly described as brief.

Further reports, page 3.

saw-type motor. It took Mr Franklin six months to build. Mr Franklin, who has been flying models "on and off" for 30 years, said that pilots of full-size aircraft agreed that flying models was harder, because the controls were more sensitive and the pilot was not always aligned with the aircraft. A ground-based pilot had to remember to reverse the control instructions when the model was flying upside down or towards him, he said.

Photograph by ANNETTE DEW

THE PRESS

Cosmos, job link not seen

PA

Wellington

A belief that an "understanding of the deeper courses of the cosmos" was needed to gain employment was not the ideal motivation for Access training courses, said the Minister of Employment, Mr Goff, yesterday.

In Parliament, the Opposition spokesman on employment, Mr Winston Peters, asked Mr Goff to clarify Labour Department concern about the \$110,000 budgeted by the Canterbury Regional Employment and Access Council for organic gardening courses run by the Pesticide Action Network.

A departmental report written for the Canterbury R.E.A.C. "indicated some concern" as to whether the trainees were within the Access target group, and whether the course's results met the scheme's object of training people for employment, he said.

Mr Peters then asked Mr Goff to explain the validity of such funding when a student, on completing the course, was reported as saying: "What I need to become employed is a proper meaningful sense of reality in which I can fully develop my capacities as a human being to live and love and understand the deeper courses of the cosmos, to be of use to the Greek goddess of the Earth and the gods as we are."

However, the Speaker, Mr Burke, ruled out the question because it was seeking an opinion.

Mr Goff said, "I would tend, given the commentaries that I have seen from some of the trainees, to believe that their motivation and their intentions were not what I would ideally like to see in such a course."

department's Christchurch, New Brighton, Riccarton, Rangiora offices.

The "dramatic increase" in the department's sources to the limit, assistant director of services in Christchurch,colm Millar.

It had not only put the staff but also on parents who provided able service for the abused, he said.

The department could only with priority work sent such as child abuse care of State wards.

"Other areas of our naturally have had to be reduced."

Mr Millar said that the

Big plane

PA

Inver-

"Positive signs" that a Queenstown International will be working in three drew Air New Zealand to no surprise announcement yesterday that it would launch weekly Boeing 787 flights from across the Tasman.

Reacting to comments the Queenstown-Lakes District Mayor, Mr John Davies, the now had "no doubt" the new million airport would prosper after initial investigations, New Zealand revealed big plans than expected.

The head of Air New Zealand public relations division, Mr Freer, said from Auckland the airline was "delighted" at Mayor's operational target three years for the new airport proposed beneath The Remarkables Range.

Air New Zealand was expected to bring in one or two in-

Super

PA

Wellington

The Opposition was prepared to be "responsible" in developing a joint approach to the reform of national superannuation, said National Party leader, Bolger, yesterday.

He was commenting on a mark by the Opposition spokesman on social welfare, Mr V Young, that National and Labour policies were similar enough to allow them to work together changing the scheme.

At the time of the 1984 general election both parties w-

Inside

Fiji links reduced

The Government announced yesterday new measures to distance New Zealand from Fiji's military regime.

—Page 2

Canterbury administration

The United Council wants to see a single governing body established for Canterbury.

—Page 4

Suicide squads

Small guerrillas have raised suicide squads to try to hold back Indian troops, according to a Sri Lankan report.

—International, page 8

Erebus documentary

"Erebus: the Aftermath" was as good as anything that TVNZ has done, writes "The Press" reviewer Ken Strongman.

—Television, radio, page 15

Right under your nose?

Geoff Mein reports on thegolics, a phenomenon that could provide clues to the course of man's evolution.

—Features, page 17

Dillon Dean favoured

Dillon Dean looks hard to beat in the \$50,000 Lion Brown Rising Stars Final at Addington this evening.

—Racing and trotting, page 26



A search for the Kalkoura giant weta has succeeded.

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CHRISTCHURCH NELSON DUNEDIN



'Job view not ideal'

WELLINGTON (PA). — A belief that an "understanding of the deeper courses of the cosmos" was needed to gain employment is not the ideal motivation for Access training courses, the Minister of Employment, Mr Goff, says.

In Parliament, the Opposition spokesman on employment, Mr Winston Peters, asked Mr Goff to clarify Department of Labour concern over the \$110,000 budgeted by the Canterbury Regional Employment and Access Council for organic gardening courses run by the Pesticide Action Network.

Mr Goff said he had seen a newspaper report on productive ecological system courses run by the Christchurch Polytechnic.

A departmental report written for the Canterbury REAC "indicated some concern" about whether the trainees were within the Access target group, and whether the course's results met the scheme's object of training people for employment, he said.

Mr Peters then asked

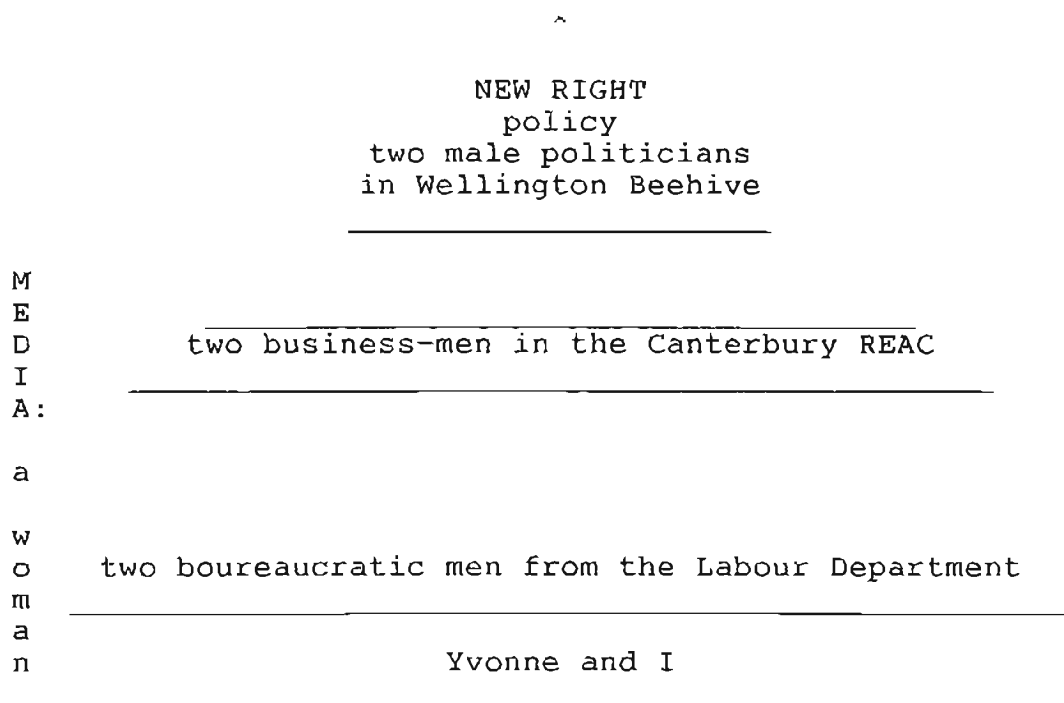


Mr Peters

Mr Goff to explain the validity of such funding when a student, on completing the course, was reported as saying: "What I need to become employed is a proper meaningful sense of reality in which I can fully develop my capacities as a human being to live and love and understand the deeper courses of the cosmos, to be of use to . . . the Greek goddess of the earth and the gods as we are."

The Speaker, Mr Kerry Burke, ruled out the question because it was seeking an opinion.

Figure 3

Patriarchal Hierarchy at work

Based on the New Right policy of free-marketing the unemployed people around the mechanistic concept of "training trainees" all of them -from their positions of supreme power-were judging and "eliminating" from their "production line" the pioneer work initiated by two women in Christchurch: Yvonne Steinemman and I.

As a result of patriarchal hierarchy, our work that in 1985 and 1986 was the pride of the "liberal feminist" Special Programmes Department was made "invisible" by the Christchurch Polytechnic. The political "scandal" through the media, could jeopardize the future "stability" of the Department, which finance -including the salaries of all

the staff and the HODS and the course budgets-, had already started to be negotiated with the Polytechnic and the "new" REAC authorities. Hence, our crisis was kept "as confidential" and we were not allowed to talk with the media.

Yvonne Steinemman and I worked in a context of physical conditions that other tutors would never accept; but we did, because we wanted to demonstrate that - starting "from scratch"-, it is possible to give life to a dead environment and to transform it into a living ecosystem: beautiful, edible and productive of energy. Since our SPECS curriculum included skills for survival in difficult conditions, for us it was not a problem that the "pre-fab" we used as a "classroom" in Opawa did not accomplish the minimum standards of the Education Department and that our "loos" at Dyers Road were holes in the ground hidden behind the flax bushes. We had one "classroom" at Opawa intended for children education with a real capacity for ten adult people and we were a group of forty people. Hence, to solve the problem of not having another classroom, sometimes we had to divide the group in three teams having to go with the "advanced level": in summer, under the lupines at Dyers Road and in winter, inside the tool-shed in Opawa gardens; for our meetings and "formal" lectures we sat on the earth or on the weeds. We did not have telephone or electricity, taking one hour for us to boil the water for "a cup of tea" in a fire pit. Without "heaters", many times we

were shaking and -feeling that our toes started to be frost bitten-, to the point that we had sometimes to bend over our bodies to stop the frozen wind. We, Yvonne and I, were "just" two women demonstrating through an ecological learning process that it was possible to transform a piece of barren land covered in weeds, into a beautiful and edible landscape for the City of Christchurch: with few tools and plenty of participatory human energy and creativity, it was possible. The results were admired by all the visitors from here and from overseas. We were also demonstrating that the "unemployed" participants enjoyed being in our courses; particularly those considered "difficult cases" by the Labour Department because, according to some of their officials "they did not like to work", without distinguishing between "work" and "job". Those people with a long record of unemployment were officially considered "lazy" although they demonstrated in our courses to have -on the contrary-, a very high level of responsibility and commitment. These started since the moment they realized that ecological work is for their own benefit and for some people a way of self-realization. Many of them took voluntary responsibility of the gardens after the "official hours", in the week-ends and during the holidays and some started to voluntary work in their own pilot projects in the community; even those participants who before the course used to be bored, sleeping all day under the effect of alcohol or drugs, and those that for many years before

they became participants in our course "hated" a job-, became enthusiastic workers.

But the powerful men within the patriarchal hierarchy decided that the future of SPECS, that I started on to build since the moment of my arrival in New Zealand, the 16th of November 1982, would come to an end. It is remarkable that the same story in Venezuela was also repeated in New Zealand, but on reverse. While in Venezuela I was "just" a woman, minimized by the male hierarchy, isolated and doing my educational work with "minimum" resources in the "far away and small" town of Canoabo, the Venezuelan politicians in the capital city took control over my work with the community, practising what I have defined as a "patriarchal political robbery" of ecological principles for their own "environmental image".

Nevertheless, the Venezuelan politicians who decided to use the ecological principles of the project "Garbage is a Treasure" -which cost years of struggle and sacrifices-, for them to promote their own political campaign as "saviours of the environment", are not different at all from the New Zealand politicians. Here in New Zealand -as if seen in a mirror-, the political process of patriarchal "political robbery" happened again, but in reverse. The educational work of "just" two women was minimized, as running "just simple" courses in organic gardening and farming; the authorities criticized

that we were not "export oriented", but a "small" "non-commercial" scale; working in a section of "dead" or "waste" land, in the "less important" city of Christchurch and in the "down there" South Island. Although our feminist work became the focus of attention of two powerful male politicians: two professional politicians -who were located very far from "down south"- in the comfort of their "up there" Beehive offices, in their artificial environments, and in the "northern" capital city. The New Zealand politicians did exactly the same that the Venezuelan politicians did: they practised "political robbery of image", although presenting themselves to the public opinion as the "saviours" of the "tax payers money".

3) Consequences (Oct.1987-1990)

This stage will critically analyse from the end of NEW-RIGHT ACCESS courses to the beginning of "Foundation Courses", based on the New Right Principle of "Users Pay Money". The consequences of the campaign in the media in 1987, were very destructive for all the participants involved in SPECS -on a personal and on a collective level- and we were puzzled because the two "open letters" of protest written by the "tutors" and the "students" were never published by the media: they simply "disappeared".

That year "my" HODS were having a difficult time competing for funding with other "training providers"

before the REAC-ACCESS Council. Continuing my "loyal" position to the Department of Special Programmes I could not accept to talk with the many journalists who wanted to interview me about the crisis. I told my HODS that I will keep the SPECS "case" -which involved by name in the media-, as "confidential", for not jeopardizing the institution, that mean the women that I considered my friends, no my "bosses". My position, seen in the context of the hierarchical pyramidal structure of the Department of Special Programmes, rises the issue of power and control between women which is hidden under a mask of "loyalty" to the institution, an important factor in the management of the crisis with the NEW RIGHT-ACCESS:

Power issues between women maybe far more important than have been recognized. As more and more women become aware of their own power and openly exercise it, both personally and institutionally, it is inevitable that power conflicts between women will become increasingly common¹.

The power conflict within the hierarchy of women in the Department was expressed as the "gossiping culture" with destructive comments about my work by one of the women tutors: she assumed that I was based on the "ideas of Paulo Freire"-which she rejected since they were "opposed to the principles of ACCES policy". Criticism against me were expressed without me being present. The "negative image" of the SPECS courses was embarrassing for the Department and the situation became "potentially

¹ Woolsey, L. and McBain L-L., Issues of Power and Powerlessness in All Woman Groups, Women Studies In "Forum" Vol.10, NO 6, p. 579. U.S.S., 1987

destructive":

At this stage in women's development, it is necessary for leaders of all-woman groups to address women's power issues; otherwise, issues of power and control remain hidden, indirect, and hence, potentially destructive¹.

My work was made "invisible" in the Department of Special Programmes: not only my picture was taken off the board that welcomes the visitors in the foyer of the department, but also 17 of educational work were also made "invisible": one of my HODS decided -in 1987- not to include my years of teaching previous to my work in the Polytechnic, which erased my status as a "senior lecturer". In my files I discovered "0" years of teaching. I referred my personal situation to the union; it was personal since my name was mentioned many times by the media during the crisis. I wrote for the "Association of Tutors in Technical Institutes", a long document which was classified as "highly confidential". In the document I analyzed the situation in all detail, and demonstrated that the data presented in the "evaluation report" of the Labour Department, was not correct; I demonstrated that all the statements against the SPECS courses were biased or false. One of the most important facts is that the course was -in the reality-, the cheapest course of the Department of Special Programmes.

The "union" organized two meetings in the privacy of the Association of Tutors of Technical Institutes

¹ Woolsey, L. and McBain L-L., Opus cit., p. 579.

office. The first meeting was held with the functionary of the Labour Department and his boss. The man who wrote the report -with tears in his eyes and with a long letter of apology-, did swear that he had not given to the media, the confidential questionnaires with the comments of the participants. His boss, in turn, said that "he will never be given the responsibility again" of "evaluating" our SPECS courses. He also blamed all the situation on the REAC and not on the Labour Department. The second "confidential" meeting organized by the union was with the "chairman" of the REAC Council, the famous businessman. The lady of the union warned me "not to upset him" because he recently had a heart attack, although she did not acknowledge that I had a pain in my heart too. In the meeting this man said that nobody in the REAC knew how the journalist Sue Lancaster had access to the questionnaires of the participants. He also said that he was upset because of "the political football" that was being played with my name and explained that he was not in Christchurch when the crisis started. In other words, this "chairman" of the REAC also was -as the head of the Labour Department-, "washing his hands" and blaming others.

It must be said that -back in 1987- I was asked by one of my HODS to propose a new type of course under the policy of "Foundation" which intention is to fill "...a gap in the present programmes between the short STEPS and YPTP courses on the one hand and advanced or specialised

higher level vocational or university course on the other."¹ Her intention was to provide the basis for continuing my educational work in the Department of Special Programmes beyond the crisis with ACCESS. Hence, I designed a course on "Organic Gardening and Farming" within the policy of "Foundation", partially financed by the Education Department but mainly based on the free-market principle of the "users pay money". The "Foundation" courses would "...offer a coordinated programme of skills, demonstration, and practice in a range of occupational families..."². In 1987, while I was with Yvonne finishing ACCES courses, the Department of Special Programmes offered the full-time tutor position for the Foundation course in "Organic gardening and Farming", and a woman, was selected. I decided to pursue my studies at the University of Canterbury and dedicated myself for the last three years to learn more about this country and specially, about the New Right. Now I am convinced of the true nature of the feminist axiom that "the personal is political". Effectively, the political crisis with the Labour Department, with the REAC, with the journalists and with the politicians in Wellington, destructively affected my health, my marriage, my work and my levels of self-confidence. I became a part-time tutor and -finally-in 1988, I became unemployed. Today, I live from Social Welfare, and -in

¹ Skill For Young People, 1985 report, p. 19

² Opus cit., p. 19

five days-, I will leave the country "for good".

II CRITICAL ANALYSIS OF CASE STUDY 2.

The majority of the participants of "Foundation" courses are highly educated, white and middle-class; some of them have a pragmatic tendency "to be practical" and "anti-theoretical", and are not used to philosophical discourse. Others have serious criticisms against the conventional health system and share environmental concerns. Their general tendency is to learn "organic" skills for improving their personal lives or for boosting their commercial "organic" ventures in their own "organic" properties, farms or orchards. The participants in 1990 have expressed their views on the actual paradox of the actual decade which is the realization that New Zealand is not considered any more a "developed" country. They feel that the "standards of life" of many people in this country start to resemble those of people in "underdeveloped" countries. Analysis with the participants have also revealed that there is a confusion about the "green commercialization" and the "environmental green" politics.

To "evaluate" at this point -what three hundred participants are doing after the courses that I started - as early as 1984-, is impossible. Although it is important to know they put ecological knowledge, methods, skills, values and ethical principles, into practice; it

is also important to know what community actions they have started, and how they adapted pilot projects to their local realities and needs of learning of the community. Or to know if they have initiated any political actions in order to challenge and to change the patriarchal hierarchical nature of this society. The participants are gone, but I am sure they have changed, guided by ecological ethics and consciousness.

However, it seems that for some people, on the contrary, New Zealand is a country "Going for Gold" since... "As a trading nation, we take part in competitive international markets."¹. The convenient concept "we", in the above phrase, makes invisible the rich elite of New Zealanders -or "them"- who are the only ones able to "go for gold" around the world in their private jets. Although it is true that New Zealanders do not know what hunger and poverty is. Maybe the old generation of New Zealanders who were active during the Second World War -now retired - experienced times of relative scarcity, but they were still privileged compared with the miserable situation of other countries. Maybe some people in New Zealand are starting to experience for the first time in their lives, "less" privileged conditions of life and unemployment and "less protection" of the "father-government"; but these new "uncomfortable" conditions have only a very pale

¹ Levett & Lankshear, Going For Gold, p.1

resemblance to the conditions of starvation and poverty of the majority of people living in Third World countries.

Before the seventies, the capitalist system in the rich-first world countries like New Zealand could afford to keep the "working masses" content through generous "social welfarism". Under the umbrella of the paternalistic welfare state the government had acted as "a father", as a provider of social security to the point that unemployed people could afford to live from the dole -permanently- without having to work at all. Now, with the transfer of the massive system of production to the "Third World" -the provider of "cheap" or "free" women labour, the situation of unemployed people in the "rich" countries have reached an irreversible turning point.

The relative triumph of the New Right "revolution" under the Fourth Labour Government, maybe has been a shocking experience for many people -including myself-, but at the same time, it is the most important contribution to the political maturity of un-political New Zealanders. The free-market "revolution" has promoted a more real understanding of the hierarchical and anti-social nature of the New Right society. The New Right is allowing New Zealanders to have a more realistic-sceptical perception of this country beyond the mythical: "Beautiful, Equalitarian, Pacific and Green New Zealand". It has also promoted the beginning of "lack of comfort"

in a "middle-class" society of privileged and over-protected people who had let "politics" be handled by "professional politicians".

I have concluded that eight years living in Christchurch, New Zealand was a personal struggle against passiveness, monotony, conventionalism, racism, utilitarianism and pragmatism. My educational work was allowed to develop under the umbrella of conventional and hierarchical institutions, only when social concerns were still a priority in this country: that means, before the "free-market" revolution, but not after. The growth of the educational work was permitted to happen by the authorities, because it was understood as a reformist type of adult education: as a course on "organic gardening"; that was precisely the name I had to adopt for the course proposals because "organic is popular". Immediately the authorities became aware of the critical nature of our courses for unemployed people, they decided that they did not fit in the "free-market" machinery. They need people to fit their New Right jobs. Hence, the courses were eliminated.

After the Venezuelan and New Zealand experiences, I have concluded that for a possible continuation of my work and action anywhere in the world, it is absolutely necessary a re-conceptualization which must include a total re-definition of its theoretical principles and strategies. It is necessary to adopt a theory of change

to be integrated with my past work and action in ecological adult education. The past process must be seen in two stages: the first stage have been described in the first two chapters -in the context of past educational work and action in the community-since 1978 and before 1990. In Venezuela the programme "Towards an Ecological Society"), and in New Zealand the "Recovering Waste Land Educational Project". In both cases I addressed the issues of patriarchy, economic, social and political power, the role of Transnational Corporations and the nature of the financial New Right within the global hierarchy of nations.

Although "...efforts in adult education and development to date have only rarely been guided by theory, or systemic causal explanation."¹, that is not the case of the educational "efforts" in Venezuela and in New Zealand. On the contrary, the conception of my educational work was based on three main conceptual sources that I derived from my own adult learning processes and experiences:

1) Theory of Creativity Development that guided my work as a dancer, teacher and choreographer during 1956 and 1970.

¹ Paulston and Altenbaugh, "Adult Education In Radical US Social and Ethnic Movements: From Case Studies to Typology to Explanation". In: Radical Approaches To Adult Education: A Reader, p. 115

2) The philosophical conception of the Simon Rodriguez National Experimental University in Venezuela¹ -where I was working as a lecturer-; it was based on Humanistic and Radical Theories of Adult Education, and

3) The ecological theory taught by my seven organic teachers in the U.S.A. between 1976 and 1977, on seventeen methods of non-polluting agriculture, ecological self-reliance, eco-technologies eco-design and five principles of natural eco-systems.

The description of two case studies of adult education in the first two chapters, allowed an insight of the problems encountered at practical and political levels. Although the processes in Venezuela and in New Zealand were not guided by a particular theory of change, the case studies revealed tensions and conflicts between the educational process of adults in the community, and the hierarchical context of society and its institutions. The case studies also demonstrated that -however the level of achievements on a personal, group and community levels-, these were spontaneous and isolated actions of the different groups. These actions did not have a long term political definition or direction: after the courses, the participants dispersed -travelling, changing

¹ The conception of the university was mainly based on Humanistic Adult Education Theories of Malcom Knowles known as "Andragogy"; emphasis on "Learning" and "Facilitating" theories; "Encounter Groups" of Carl Rogers; "Liberatory Education" of Paulo Freire and the "Deeschooling" theory of Yvan Illich.

from residence-, and became separated from each other.

While the people were participants in the course, the ecological adult learning process was centered on working continuously at practical levels, trying to implement in the concrete reality, the creative ideas of the people participating in teams. Although it was not a "laissez faire" or "un-structure" process. Firstly, I started conceiving a general programme of action which included full-time and part-time courses. These courses were designed towards the achievement of pre-established general aims and learning objectives, included a pre-selection of integrated contents of learning and defined specific methods of adult learning, educational strategies, and modes of evaluation.

The courses I designed were proposed to the participants before they started; it followed a discussion that could take half a day or maybe two. If everybody agreed to try these proposals then, the course would start, although with the incorporation of new ideas and any modifications agreed by the group. These changes of the general course outline were discussed and agreed by the group at the beginning of each course and incorporated into the basic course outline, including individual proposals on specific issues and individual projects. The group also decided on our internal organization, distribution of responsibilities, adjustment of calendars, timetables and administration of

resources for the implementation of pilot projects in the community.

Secondly, every body in the course -including myself-, was a "learner" and a "participant". The responsibilities of "facilitation" and "coordination" - even if they were shared and rotated between all the participants-, they were not *equally* shared. One of the first tasks of each course was to detect the expertise and knowledge of each individual. Each person contributed as a learning resource for others to share; although in each course -some times from the first day-, it was evident that a minority of people in the group had a remarkable potential for leadership. For example, since some people had more experience on participatory adult learning or had more expertise on the social, cultural and ecological issues related with the course contents than others, these people became more involved in responsibilities of "facilitation" and "coordination". Also, since some people had better communication skills, or were more confident than others or had a good sense of humour, they would also lead some activities.

Leadership and the conformation of the teams -from two to seven people-, were agreed on the basis of a random selection, and rotation of responsibilities decided by the people themselves. During the course these teams changed and rotated in such a way that each person have the opportunity to share different learning

activities with the others. The result of this flexible course outlines and organization was that each course in itself was original since each time a new course started, the participants will incorporate new ideas and activities and share their unique life experiences and backgrounds with the others. These sharing, knowing each other, definition of individual expectations and motives within the group, was followed by collective decisions on specific objectives, contents and methods. As a result of this dynamic approach to our education and collective action and struggles, the process of adult learning became for many participants -myself included-a permanent search: for solving problems and conflicts, for drawing a vision of social and ecological freedom and for personal and collective transformation. At this point it must be said that the learning process of the participants in the last twelve years was guided by the needs of change towards a new social and ecological sensibility, ethics and wisdom¹ and not by reformist "environmentalism".

The two case studies in Venezuela and in New Zealand demonstrated that the quest for a theory of change towards a non-hierarchical society where people could live in harmony with themselves, with others and with Nature is of a great importance in adult education. The following chapter responds to that need, avoiding the possibility of being absorbed by common trends of

¹ Davis, D.E., Eco-Philosophy. A Field Guide to the Literature, Foreword, p. xii

"environmental-green" reformism in adult education. For that purpose, it is required that any future conceptual development of the ecological educational work and action be guided by a distinctive theory of social, economic, cultural and personal change based on ecological ethics and wisdom. It is also important to understand the needs of learning of adults in the actual decade and to redraw the meaning of "certain" theories of adult education.

Hence, the second stage of my work is characterized by the need to find and select a theory of change which dovetails a specific adult education theory with an ecological theory into a unified conception that I will name Real Ecology Adult Learning or REAL. This conception aims to challenge and to halt the exploitation of People and Nature in the actual decade and in the future.

"RECOVERING WASTE LAND"
VISITOR BOOK

DATE	NAME	ADDRESS	COMMENTS
07/01/86	Leonie Richardson	51 Lyndhurst Cres	The dawning of a new era. ✓
07/01/86	Paul Brody		
→ 08/01/86	John Palmer	D.S.I.R. Lincoln	A great system ✓
09/01/86	Gary Moore	Internal Affairs Dept	
10/01/86	Martin Walker	Bio-dynamic Assc	
10/01/86	Sue Costello	Christchurch Polytech	
11/01/86	Valda White	135 Junction Road	
22/01/86	Judy Sidon	Dept of Labour	What great work has been done! ✓ Most impressive.
→ 22/01/86	Janette Borette	Civic Pride Campaign	Great Location. ✓
22/01/86	Robyn Bern	Civic Pride Campaign	Exciting!
22/01/86	Joy Kingsbury	Civic Pride Campaign	Keep up the good work.
22/01/86	David Batten	City Health Dept	
22/01/86	Garth Lomax	NZ Labourers Union	All power to you all!
24/01/86	Aran Esson	1 Simeon Street	Great work, really beautiful.
24/01/86	Matt Beathie	21 York Street	Smells lovely
24/01/86	Kathie Bennet	12 Blakiston Street	Quite impressive
24/01/86	Angela Bennet	12 Blakiston Street	What a change, very good.
24/01/86	Andrew Thomas	20 Fenhall Street	Positive use of an ageless force, especially since in inner city!
24/01/86	Rachel Patterson	79 Ottawa Road	

"RECOVERING WASTE LAND"
VISITORS BOOK

DATE	NAME	ADDRESS	COMMENTS
21/02/86	A Pouaka	4 Sanders Place	Most rewarding
21/02/86	N Downey	Lione Kauri Rd, Kare kare	Very inspiring, brilliant cooperation
21/02/86	P R Alexander	Maddisons Rd RD 5	Excellent effort, very well ✓ explained
21/02/86	Sue Litt	63 Englefield Rd	Enlightening tour
21/02/86	Marilyn Beaton	27a Jacksons Rd	Interesting
21/02/86	Keith Lyons	64 Middleport Rd	Very interesting and great to see
21/02/86	David Lane	15 Blakehall Rd	Good effort
21/02/86	Annette Kerkmuster	368 Madras St	Really inspiring, great seeing all the creative planting
21/02/86	Saren	571 Manchester St	Inspiring!
21/02/86	Alistair McKee	143 Selwyn St	Inspiring, thank you Louis!
21/02/86	Ali Watersong	13 Brenchley Rd	Inspiring, exciting, wonderful
21/02/86	Christian Bocl	86 Cresswell Ave	Great
21/02/86	Stephanie Beth	14 Wise St	Will be back
21/02/86	Cynthia Roberts	53 Dyers Pass Rd	Amazed at what has been achieved, wonderful
21/02/86	Lynda Glass	3/12 Latimer Square	Very creative, well done
21/02/86	Maurice Lye	105 Champion St	Very interesting, well done
21/02/86	Doreen Bond	1 Duncan St	Inspiring, great work
21/02/86	Pauline Baker	123 Sullivan Ave	Oh! If only my garden looked like yours - you make it ✓ sound so easy, great work!
21/02/86	Rachel Weir	Methven	It's going to get there!
21/02/86	Belinda Hessell	Wellington	Very informative, esp. diverse crops
21/02/86	Douglas Braun	ChCh	Nice place, keep going

"RECOVERING WASTE LAND"
VISITORS BOOK

DATE	NAME	ADDRESS	COMMENTS
21/02/86	Lesley Towart	Gilby St ChCh	Exciting to see this in NZ
21/02/86	Victor MacGill	ChCh	Unbelievable, really marvellous
21/02/86	Ngairie Mollay	Halswell	Very interesting, back later
21/02/86	Rachel Penniall	ChCh	Interesting, hope to bring horticulture class here
21/02/86	Peter Oakley	7b Jade Place	I would like to learn more about this method
21/02/86	Diane Chinall	8a Rutherglen Ave	Marvellous
21/02/86	Oscar, Kitty Balent	163 Keyes Rd	Very interesting and helpful
21/02/86	Peter Smith	Leeston	Great stuff, interesting
24/02/86	Trevor Wright	Rangiora	Fantastic work being done for conservation of our most valuable asset - land
24/02/86	Arthur Wood	Riccarton	Certainly different
24/02/86	Gerald Sandrey	Rangiora	Fascinating
24/02/86	Noel Phillips	Diamond Harbour	Impressed by intensive method
28/02/86	Frania Zygadlo	Diamond Harbour	Very impressed, inspiring
28/02/86	C G Hunt	43 Rowan Ave	Fascinating experience
28/02/86	Beverley Hunt	43 Rowan Ave	Extremely interesting, very friendly staff
28/02/86	Stuart Milne	Hawarden	Not too bad Ofelia
28/02/86	Harry, Phyllis Mann	9 Kibblewhite St	All brothers and sisters
04/03/86	Chin Chiew Foan	3/7 Newnham Terrace	Very impressive, hope that the idea can spread to more people

CHAPTER III

THE QUEST FOR A THEORY OF CHANGE FOR
REAL ECOLOGY ADULT LEARNING

One of the problems adults face is confusion at all levels. For example -in the decade of the 1980's-, the political and commercial manipulation through the media of concepts such as "natural", "healthy", "green" and "environment" started, making invisible the exploitative nature of "green" consumerism. These concepts have reached a high level of popularity to the point that now politicians, corporate enterprises, theologist, movie stars, and the royalty, all want to project an "environmental-green" image:

Suddenly, business professionals and environmentalists are talking a similar language; green business is here and it's going to be big. That's the word from environmental campaign offices, to the boardrooms of multinational corporations¹.

The above phrase is paradoxical because the emphasis on "big green business" controlled by an elite who manipulate global consumerism -even if is "green"-, is contradictory to the non-hierarchical ecological principles that this thesis is searching for.

On the one hand, the emergence of "green business" is running parallel to the position of the World Commission on Environment and Development known as

¹ Adams, Turn Green and Grow, p. 12-19 In: "NZ Business". August, 1990

"sustainable development" which the "primary objective" is... "The satisfaction of human needs and aspirations."¹ The theory of "sustainable development" makes it not clear that some "humans" need to live in luxury and that their "aspirations" include economic, social and political power, while other "humans" are powerless and starve. Hence, the use of "neutral" concepts such as "humans" in the "environmentalist" arguments is going to be further scrutinized in this chapter.

The role of Transnational Corporations TNC is going to continue having a "substantial impact" -although they already have had a big "impact"- at the expense of the Third World countries; this is a political process that must be uncovered in relation with the development of First World "environmentalism":

Transnationals can have a substantial impact on the environment and resources of other countries and on the global commons. Both the home and host countries of TNC share responsibilities and should work together to strengthen policies in this sphere².

The global "impact" of Transnationals -"green" or "not-green"-, and the above contradictions of "working together" with TNC (controlled by the New Right), must also be analyzed. Hence, before attempting the selection of a theory of change for REAL~, the first goal of this chapter is to establish a clear distinction between "Environmental Theory" and "Ecological Theory" or

¹ World Commission on Environment and Development, Our Common Future, p. 43

² Ibid., p. 86

"Ecophilosophy".

In order to establish a first conceptual distinction between the two theories, I will adopt the arguments of Donald Edward Davis according to whom... "Reform environmentalism (as it came to be called), as a political response to environmental degradation, was piecemeal and issue oriented..."¹. This statement is referred to Contemporary "Environmental Theory" which emerged in the decades of the sixties, as a multidisciplinary effort to understand the destructive results of industry and technology. At that time pollution and destruction of natural ecosystems started to be evident on a global scale:

These were primarily axiological approaches, which attempted to identify a limited number of fundamental principles, and from these deduce and develop a comprehensive environmental ethic. As time went on, it became clear that an environmental ethic by itself was not going to go deep enough to appreciate the nature of the problems facing us².

...and if "environmental ethic" was superficial in its analysis of the "industrial-technological society", "Ecological Theory" or "Ecophilosophy" -on the contrary- was born from the dissatisfaction of some philosophers with the reformist nature of "environmentalism" and with its lack of radical critique.

The "eco-philosophers" went further towards a new

¹ Davis, Ecophilosophy. A Field Guide To the Literature, p. xi

² Davis, Opus cit., p. xi

total understanding of our place within Nature and -being ourselves integrated with Nature-, "...not just intellectually but with one's whole being."¹ They not only developed new theories but also guidelines for action towards a whole personal and social transformation embracing an ecological culture, vision and wisdom.

The second goal of this chapter is to select a theory of change for REAL. For this purpose, three conceptual frameworks will be analyzed. The first two conceptual frameworks, analyzed within the context of "Environmental Theory", are: "Free-Market Environmentalism" -and its relationship with "Green-environmentalism"-, which continues the liberal-capitalist tradition; and "From Red to Green or "from Green to Red" Environmentalism"² -which continues the Marxist-socialist tradition-, also known as "Post Industrial Socialism".

Once these two frameworks are scrutinized within the context of "Environmental Theory", it is also necessary to set apart "Adult Environmental

¹ Ibid, p. xii

² I have based the name of the above framework on the titles of two books:

A book by Rudolph Bahro: From Red to Green: Interviews with the New Left Review. Verso Books, London, England, 1984.

Also the book with a similar title by Joe Weston, Red and Green. The New Politics of the Environment. Pluto Press, London, Great Britan, 1986.

Education"(AEE) from "Real Ecology Adult Learning". AEE emerged in the decade of the 1960's and adopted different modes, in capitalists and socialist countries. A critical analysis of case-studies of International Programmes of Adult Environmental Education is included in the framework of "Environmental Theory".

The thesis continues with the analysis of "Eco-feminism" within the context of "Ecological Theory". The identification of values, assumptions and beliefs of the three frameworks will reveal their similarities, differences and internal contradictions. Eventually, one of the three frameworks is selected and integrated with a particular theory of adult learning.

The development of a new conception for future work and action in adult and community education is going to be:

- 1) *Grounded* in past ecological work, community action and adult learning experiences in Venezuela and in New Zealand;
- 2) *Analyzed* in the context of the needs of adult learning in the present decade, and
- 3) *Conceived according to a theory of change* becoming "Real Ecology Adult Learning", REAL.

I. ENVIRONMENTAL THEORY

1) The Context of "Environmental Theory".

The roots of "Environmental Theory" must be searched for within the traditions of idealism in Western thought. One idea is known as the *elevation of the human species* which considers "humans" as superior to Nature:

The conviction blazes right through this tradition of idealism over the centuries -from Moses to Plato to Marx- that the difference between the human species on the one hand and all other natural species is qualitative and fundamental: 'man' (meaning the species, not the gender), with the spark of transcendence, has alone the potential to become the 'lord of nature'.¹

Grounded in the development of western thought, three views evolved as "Environmental Philosophy", serving as the background of the dominant convictions of contemporary "Technocracy" which is the "...belief in the efficacy of technological fixes and bureaucratic organizations to overcome natural obstacles to development."² "Development", according to "environmentalism", is considered as synonymous of "progress" of which the ultimate purpose is to benefit "society".

Two major systems of thought evolved from the idea of *elevation of the human species* over the natural world: "dualistic" and "managerial". The first conceptual trend

¹ Berki, The Genesis of Marxism, p.13

² Pawson, Erick, Environmental Philosophy , p. 3 .
Hand-out of GEOG 104: "Environment and Resources".
University of Canterbury, 1985.

or "dualistic" is characterized by oppositional thought of polarized concepts which considers "humans" and Nature as separate entities. One version of dualistic thought is "Environmental dominion" which assumes that Nature is an obstacle and humans -as managers- have to fight against Nature, conquer and control Nature and finally, use what Nature "provides" for their own benefit. According to this version, "Development" is seen as a permanent process of economic *growth* and *expansion* without concern for the natural world. The other dualistic trend -that Nature determines Human actions-, evolved as "Environmental Determinism" from the development of three sciences in the XIX century: economy, biology-evolutionism and geography; these sciences established their "scientifically explained" sets of "economic laws" or "natural laws" or "historical laws" for interpreting Nature as well as society.

Firstly, the "science" of economy. Capitalist economists in the XIX century developed three ideas: one, of business competition as the main force that kept society in balance. The second idea is due to the economist Thomas Malthus, who established "...that the population would increase faster than the food supply"¹. The idea of the economist David Ricardo followed: "...with the scientific argument that "laws of nature" were operating and the poor were responsible for their

¹ Capra, OPus cit., p. 210

own misfortune"¹. These "economic" ideas not only influenced the scientists in the last century but are still influencing some trends of "contemporary environmentalism" that continue blaming "the poor". One assumption of contemporary environmentalists is that "the poor" are eating the genetic "resources" -which originated in the Third World-; they believe that this "genetic material" or "germ plasm" -on the contrary-, must be given free and kept for the exclusive use of genetic engineers, breeders and multinational corporations paying billions of dollars for the scientists' research. These companies will receive in turn the profits for the sale of the "new" and "improved" varieties:

The North may be 'grain rich' but the South is 'gene rich': the genetic resources of most cultivated plants are found in the developing countries, notably in the tropics, but the selection and improvement operations relating to these plants mainly take place in the industrialized countries².

And the new genetically engineered varieties are substituting the traditional crops of the Third World. Continuing the same trend of "natural laws" applied to "the poor", neo-Malthusian thinkers of today assume that "the poor" are the main cause of environmental destruction, and that "the poor" are lowering the "life styles" of the rich countries. Hence -as it will be further explained-, this intellectual trend of biological

¹ Ibid, p. 211

² Sasson, A Challenge for the Developing World, p. 30 In: "The Courier" March, 1987

determinism have established that it is necessary to control the birth of "the poor" in the "poor countries". Some "environmentalists" have also proposed -as a solution to the problems "caused by "the poor"-, to let them die of starvation which is a "natural law" of selection. It is evident that the conceptual framework of "scientific economy" in the nineteenth century has served until today to justify the capitalist system - based on competition, greed, domination and exploitation of People and Nature.

Secondly, the new science of "Biology" which not only opposed theological "creationism" but established the superiority of men over women. It started with the studies of Jean Baptiste Lamarck on environmental influences in animals and the possibility of passing their biological changes -due to environmental factors- to the next generation. The biological tradition met the economist ideas of competition for survival of Thomas Malthus, culminating with the concepts of chance variation, natural selection and competition in the "Evolutionist Theory" of Charles Darwin:

He saw the typical male as strong, brave and intelligent; the typical female was passive, weak in body, and deficient in brains. 'Man,' he wrote, 'is more courageous, pugnacious, and energetic than woman, and has more inventive genius.'¹

Darwin applied principles of "natural evolution" to social "evolution": competition, adaptation to the

¹ Capra, quoting Darwing, Opus cit., p. 106

environment and survival of the strongest.

Thirdly, the Science of Geography. The evolutionist ideas of adaptation had a strong influence in the German geographer Friedrich Ratzel who assumed that "...human societies, like plant and animal communities, adjusted to the physical environment."¹ The dualistic thought of "male environmental determinism" took a total different view with the "female environmental determinism" based on the conception of earth as a nurturing "mother" of the geographer Ellen Churchill Semple:

To her, all geographies could be reduced to essentially the study of *environment*- man relationships. She contended that the modification of human societies by the environment was itself a 'natural process'...².

However, the identification of Nature as a female originated in ancient cultures centuries ago. The contemporary conception of planet Earth as a nurturing, caring "Mother" is accompanied with the idea that women are biologically superior to men; it is also related with the idea of the *benevolent universe* which considers reality as a harmonious creation, as an organized entity "...governed by immutable laws."³ The biological conceptual trends of identification Woman-Nature, will be further analyzed in the second section of this chapter on "Eco-feminism".

¹ Pawson, Opus cit., p.9

² Pawson, Opus cit., p.11

³ Berki, Opus cit, p.12.

The second system of thought is "Environmental Stewardship" which managerial approach to Nature considers that humans are moral agents acting as the guardians of Nature. It evolved from the Judaeo-Christian tradition as the "moral managerial" approach to Nature or "stewardship" which proposes the "conservation" of "natural resources" for humans to use. The writers of the Old and the New Testament were aware of different values in Nature such as "economic, recreational, scientific, aesthetic and sacramental" values¹. However, the Biblical dominion and manipulation of 'man' over non-human organisms is a constant theme; for example, '...the idea of the promised land was described largely in terms of economic use.'², although the Bible also "...delineate man's role as being responsible for living things, without any apparent reference to their usefulness to man."³.

"Man" is the only organism in the Bible who "...merited the status of a moral agent."⁴, and also the only one to measure Nature in terms of "value". According to the Biblical merit, the conclusion is that... "As

¹ LaBar, A Biblical Perspective of Nonhuman Organisms: Values, Moral Considerability, and Moral Agency, p. 90 In: Religion and Environmental Crisis, The University of Georgia Press. Edited by Eugen Hargrove. U.S.A., 1986.

² LaBar, Opus cit., p.78

³ LaBar, Opus cit., p. 88

⁴ Ibid, p. 90

inheritors, willing or not, of the Judaeo-Christian heritage, we must be moral agents who consider nature morally. It has great value"¹. This is an expression of the idealistic tradition that considers "we" as superior to rest of Nature, "...alone capable of raising, of transcending its own actual existence"². Firstly, the ambiguous concept "we" do not distinguish between the "moral agents" holding economic, political and social power and the other "moral agents" controlled by them. Secondly, the "great value" of Nature has been already appropriated resulting in its destruction through "development" by the "non-green business". Thirdly, the recent rediscovery of the "great value" of Nature means more economic power for the emerging "green business".

Given the serious ambiguity of the "environmentalist" language, the conceptual connections between "development" and "environmentalism" must be further analyzed in this chapter because, according to the "environmentalist" framework adopted, the conception of "development" will also vary. There are two extreme positions: those in favour of unlimited exploitation of natural "resources" for short term economic goals, and those that held the positions of "conservation of nature" and "protection of wildlife" without concern for People. All the above systems of thought: "Environmental

¹ Labar, Ibid., p. 90

² Berki, Opus cit., p.13

Dominion", "Environmental Determinism" and "Environmental Stewardship", are all based on two main assumptions: that Nature exists for the satisfaction of "human" needs and that "humans" have the *right* to use Nature for their own benefit. A summary of the three views of "Environmental Philosophy" serves as the background of the "Environmental Technocratic Approach":

Table 6

<u>SUMMARY OF ENVIRONMENTAL THOUGHT¹</u>		
"Environmental Dominion"	"Environmental Determinism"	"Environmental Stewardship"
<u>DUALISM</u>		<u>MORAL MANAGERIAL</u>
Humans and Nature are separated entities		Humans are active agents in environmental change
Human "mastery". control over Nature mind above Nature Humans=Active Nature=Passive	Nature controls, determines and constrict Human actions. Nature=active Humans=passive	Nature is a provider of "natural resources". Humans as "wise users", "conserve" the "resources" Humans are "moral agents"
Man=science, reason Nature=feminine "she" "unconscious", must be controlled. (Rational Sexism)	Evolutionism Adaptation Natural selection "Natural Laws" applied to society	"Resource Managers"
"Mother Earth" (Sexism)	Anthropogeography (Sexism)	"Husband(ry)"
<u>THE TECHNOCRATIC APPROACH</u>		
<p>"Humans" have the right to "organize" Nature for their own purposes. Nature is a stock of "resources" for "humans" to use. Life is a "resource".</p> <p>This establishes the need of specialized "managers" of "natural resources". "Dominion" and "control" of "resources" including managerial control of Life, are the primary goals.</p> <p>"Conservation" is "non productive" and must be separated from "Environment" which is "productive".</p> <p>"Environment" is a commodity to be exploited and manipulated for its "development", for "productive" purposes. The objective of "Development" is to satisfy "human needs".</p>		

¹ Based on the document of Dr. Pawson already quoted.

a) Contemporary Environmental Theory.

"Contemporary environmentalism" emerged within the context of social movements of the 1950's and the 1960's in the capitalist countries of the First World. At that time, some of these movements were considered "radical" since they challenged the "status quo", such as the "civil rights", the "anti-Vietnam war campaigns", "radical feminism" and "black power". Other movements, such as "environmentalism", "peace" and "cooperativism" adopted a moderate, non-violent line of action.

First World "Environmentalism" was a mild reaction to the first evident symptoms of chemical pollution, soil erosion and destruction of the eco-systems that started to be cause of concern in the industrialized nations. As a response, the activists of the "environmental" movement -interested in the "conservation of natural resources", protection of "wild" areas or "reserves" and the creation of national parks-, tried to introduce changes in the legislation, sending letters to the politicians¹. However... "Environmentalism as a political phenomenon was first motivated by concern for human welfare."², such a concern did not challenge the hierarchical and exploitative basis of society; nor was a philosophical search for cultural, social and ethical consciousness. It tried instead, to achieve "environmental reforms" in

¹ Davis, D. E., Eco-Philosophy. A Field Guide To the Literature, p. x

² Davis, D.E., Opus cit. Foreword, p. x

order "to improve the environment" and the "quality of life":

It philosophized and politicked without questioning the assumptions of the acquisitive, consumption-oriented society. Narrowly conceived environmental ethics, too, was only reformist; it did not involve moving to an ecological consciousness¹.

...although an "ecological consciousness" by itself without a social and cultural consciousness becomes also reformist and "narrow". "Environmental ethics" was going to grow and prosper with the addition of a new trend of global Neo-Malthusianism sponsored by a technological elite.

b) Environmental Neo-Malthusianism.

The growth of "environmentalism" as a social movement in the 1960's was coincident with the growth of world population which became considered the first "menace" for the privileged "standards of living" of those living in the comfort, overabundance and overwealth of the First World:

Dwight D. Eisenhower prophesied that if the world's inhabitants continued multiplying at the same rate, not only would the danger of revolution be increased, but there would also be a lowering of living standards for all peoples, including his own."²

...and the presidential concerns for keeping intact the privileged "living standards" in the First World, made necessary to politically control the growth of those "inhabitants" that "continued multiplying" in the Third

¹ Davis, Opus. cit., Foreword, p.xii

² Galeano, E. Opus cit. 1973, p. 16

World. Firstly, the concern for the "living standards" had to be elevated to a more important category than a presidential "prophecy". Secondly, the concern had to be "scientifically" justified through "high-tech" Neo-Malthusianism. Thirdly, the technological trends of the "limits to growth" had to be directly linked with "body politics" -according to which- the bodies of women become another "colony" for patriarchy to exploit¹. For its implementation in the practice, "body politics" proposed by scientific leaders of "Technological Environmentalism", had to be incorporated into the high levels of decision; this was possible through politics of adult education on a global scale. The process evolved as follows:

Firstly, a "Scientific-Technological Justification" was promoted as a justification for keeping the "standards of life". A group of technocrats raised an alarm on how to avoid a general "overpopulation" catastrophe and recommended "the limits to growth"². They narrowly focused on the computerized inter-relationships between: "natural resources", capital investment, population-growth, geographical space, agriculture, pollution and global scarcity of food resources: they combined the "environmentalist" approach

¹ On "colonization" of bodies of women see: Mies, Women. The Last Colony p. 74,90, 123, 162 and Patriarchy and Accumulation on a World Scale, p. 26-28

² See Meadows, D. and others, The Limits to Growth, Universe Books, New York, London, 1972

to nature as a provider of "natural resources" with the novelty of mathematical models for the design of the future world. This "high-tech" trend of technologists started firstly with the "Club of Rome"¹ in 1966. "The Club" leaped over the frontiers of the national states towards the planning of the future of the total "global society" by an elite organized as a "club" of world experts. Under the umbrella and sponsorship of "The Club" a new intellectual-technological thought merged the "...systems analysis, simulation, decision theory, linear programming, stochastic models- based on the computer..."² The technological thought culminated with the design of a first model of "World Dynamics" by Jay W. Forrester of the Massachusetts Institute of Technology. After completion, his model served as the basis of a team directed by Dennis L. Meadows for the design of other model known as *World 3* or "The Limits To Growth"³. The concern of these technocrats for safeguarding their own "standards of living" was central in their "world models" which included "...whether pollution (or indeed another problem) is likely to be localised or widespread."⁴.

¹ For a recount of the origin of the "Club of Rome" initiated by the Italian industrialist manager Aurelio Peccei since 1966, see Cole and others; *Opus cit.*, p. 205-207

² Cole, H.S.D. and others, Thinking About the Future. A Critique of *The Limits to Growth*, p. 206

³ Cole, H.S.D. and others, Thinking About the Future. A Critique of *The Limits to Growth*, p. 14-15

⁴ Cole and others, *Opus cit.*, p. 121

Although the technocrats did not mention the exploitative roots of "...pollution (or indeed another problem)..." and the hierarchical nature of their own "standards of living" as technocrats of the First World.

Secondly, the introduction of Neo-Malthusianism in Adult Environmental Education. In the opening address of a conference on Environmental Education held in England, in 1977, the participants were reminded of the **first** "environmental concern" of a previous conference in Brussels: "The Environment of Human Settlements", organised by the World Environment and Resources Council in April, 1976. The main concern of this "world environmentalists" was precisely, "...1. To reduce the rate of population growth"¹. This statement conceptually links the International Environmental Education Programme with one of the most official adult education programmes "for development" in all Third World nations, intended to manipulate and subordinate women and men through special training on contraception and abortion. Some governments have financially contributed to the "development" of sickness and death of Third World women:

Despite reports of the dangers of the Dalkon Shield contraceptive the US Agency for International Development bought half million of them, *unsterilised*, for distribution in the Third World. One set of instructions for each thousand devices².

¹ Potter, "Opening Address" in Environmental Education, Key Issues For the Future, p.1

² Wells, Underhand But Over the Counter, p.8 In: "New Internationalist". NO 129, November, 1983

The implementation of the "scientific-technological" theory of "body Politics" was made possible on a global scale, incorporating "over-population" as a priority issue in the International Programmes of Adult Environmental Education (AEE) specially directed towards programmes of "birth control" in Third World countries.

The fundamental theory beneath those "family planning" programmes is based on "technological Neo-Malthusianism" which analyses the dangers of "population explosion" as a menace to the "standards of living". AEE is sponsoring "adult training" campaigns on massive sterilization in the Third World while making invisible the patriarchal nature of those standards:

The United States is more concerned than any other country with spreading and imposing family planning in the farthest outposts. Not only the government but the Rockefellers and the Ford foundations as well, have nightmares about millions of children advancing like locusts over the horizon from the Third World¹.

In the "Third" world compulsory abortion have been imposed to women under excuses of "population explosion". For years "The International Bank for Reconstruction and Development" -known as the "World Bank"-sponsored campaigns in favour of sterilization and contraceptives in the Third World. With money and massive "adult education" the bank gave priority for lending money to those countries that implemented birth control plans:

Various U.S. missions have sterilized thousands of women in Amazonia, although this is the least populated habitable zone on our planet. Most Latin American countries have no real surplus of people; on the

¹ Galeano, Open Veins of Latin America, p.17

contrary, they have too few¹.

Patriarchy not only promotes the extinction of the people of the Third World, but the multiplication of people in the First World. First World women, specially white, are "forced" to be mothers and deprives young women of adequate contraceptive information based on the assumptions that contraceptives are inconvenient, unreliable, expensive and dangerous. Also in the "First World" patriarchy limits abortions or deny them entirely² while multiplying the possibilities of birth through genetically-engineered conception, artificial insemination and "in vitro fertilization". A new "Big Business" with the hierarchical commercialization of Life is in progress:

Computerized human gene banks are likely to offer new opportunities for wholesale genetic screening programs- some useful, other of dubious merit-for identifying individuals who harbour genes considered "defective" or "inferior"... "...data banks could quickly become reservoirs of easy genetic "answers" to complex human problems."³

At this point, a feminist position of challenging Neo-Malthusian trends has been reached : it insist on the reproductive rights and freedom for all the women in the world and their right to choose or to refuse motherhood. It also invites women to uncover and to understand the hierarchical material, social, cultural and political basis of these patriarchal restrictions, seeking the

¹ Galeano, Open Veins of Latin America, p. 16

² Jaggar, Feminist Politics and Human Nature, p. 256

³ Suzuki & Knudston, Genetics. The Ethics of Engineering Life, p.336

real possibilities of eliminating them¹.

c) Growth of First World Environmentalism and the Sexual International Division of Labour (SIDL)

The high-tech computerized additions which strongly influenced the development of "Neo-Malthusian environmentalism" in the decade of the seventies, must be seen in the context of the global hierarchy of nations. The shifting in the 1970's from the "developed" First World to the "under-developed" Third World and the consequent Sexual International Division of Labour, will be further explained in the section on Eco-Feminism. At this point, I will argue that the growth of "First World Environmentalism" in the 1970's, is related with the change of the global capitalist economy based on the "new" Sexual International Division of Labour (SIDL). The following analysis relates the development of First World capitalist "environmentalism" in the decade of the 1970's with the shift to the Third World of the massive system of industrial-technological production, controlled by Transnational Corporations (TNC).

Firstly, the shifting benefited TNC since they avoided the high cost of production in the First World countries with its "expensive" and unionized white-male labour. In the Third World, TNC found a new source of wealth in the "brown, yellow and black women" whose

¹ Jaggar, Opus cit, p. 119

labour was "cheap" and "des-unionized". It also profited from the "...exploitation of non-wage labourers, that is to say, women (housewives), subsistence peasants and generally, "marginalized" people in the Third World."¹ These "favourable" conditions permitted TNC to accumulate capital based on the exploitation of those women.

Secondly, the shifting of TNC benefited the First World "environment" and the "environmentalists" which in the 1970's started to flourish in the capitalist countries of the First World. "First World Environmentalism" grew simultaneously to the process of TNC reversing their polluting and destructive systems of industrial production, to the Third World:

All the signs suggest that dumping is likely to grow in the future with rising imports into the Third World of chemicals. From 1970 to 1978 the export of these chemicals from the West to developing countries rose by nearly 500 per cent².

Whereas the First World countries were "cleaning up" their own environments, changing legislation and organizing new bureaucratic bodies for the "administration" of their own "environments" and the "management" of their "natural resources", the Third World countries became their "rubbish dumps". The Third World was not prepared to reject the new global and corporatized forms of exploitation, domination and

¹ von Werlhof, Women's Work: the Blind Spot in the Critique of Political Economy, p. 20 In: Women. The Last Colony, 1988

² Wells, *Opus cit.*, p. 8

manipulation of People and Nature. Hence -with the compliance of national governments, loans of the World Bank, and the International Monetary Fund-, TNC transferred to the Third World not only radioactive waste, chemical poisons, pharmaceutical and agricultural substances that had been absolutely or partially banned in the First World. This process gave power to "new" corporatized Third World elites.

Whereas these synthetic poisons were strictly controlled by the authorities of the First World -such as the "Environmental Protection Agencies"- and its use limited and highly regulated by new legislation, the same poisons could be sold -or dumped, manufactured, incinerated, or stored- in the neo-colonies of Africa, Asia, South America and the Pacific Islands:

Lead poisoning is not democratic..."
 "Many Third World countries have intolerable high levels of lead in the atmosphere because the oil companies persist in selling heavily leaded petrol -at levels much higher than they do in most of the industrialised countries. Poisoning from lead can result in brain damage and death¹.

Destructive and unsustainable technologies which were considered obsolete in the First World were also transferred to the Third World: the result was the devastation of popular culture and old traditions that for centuries had evolved within the local eco-regions, and the oppression of people that knew ecological ways of living in tune with Nature. Entire rural communities had to leave their homes and lands for the World Bank to

¹ Tet Sieu, The Leaden Proletariat, p. 14 In: New Internationalist, NO 129, November, 1983.

build enormous dams for centralized systems of industrial hydropower. Whereas an "industrial Third World elite" became richer with the costly energy provided by those dams, the rural people were concentrated in urban ghettos and submitted to a new form of international exploitation by a business elite with its "national" representatives operating in each country¹. Or entire forests were "cleared" by the governments for relocating "settlers" who were to occupy a lot of land with disastrous results for the People and Nature².

Making invisible the exploitative roots of the destruction of People and Nature, some "environmentalists" are also developing a new ideological campaign of blaming "the poor" for "...the environmental degradation we lament.". It happens to be that the "we" who are lamenting, are precisely the World Bankers:

Barber Conable, the president of the World Bank, notes often that 'poverty is toxic to the environment'³

Since the 1970's the World Bankers are calling themselves "environmentalist" as if they were now the saviours of the planet. Instead of blaming themselves for the global catastrophic destruction they have caused and

¹ Education Network Project, A case Study: The Narmada Project, p.37 In: Benefit or Burden? The World Bank, The Environment and Development. Occasional paper N0 2. University of Sussex Print Unit, July, 1989.

² See case-studies in Java and in Brazil. Education Network Project, Opus cit., p.31-34

³ Education Network Project, Benefit or Burden? The World Bank. The Environment and Development, p. 10

sponsored in the Third World since the end of the Second World War, the World bankers are now conveniently blaming "the poor" for it.

The second "coincidence" which links the development of "environmentalism" with the expansionism and growth of Transnational Corporations shifting production towards the Third World, is the "growth" and "no growth" debate held in the First World. This was a debate between the ideologists of the "stationary state" sponsoring the principle of "ecological scarcity"¹ and their opponents; a debate considered "sterile" in mechanic-computerized terms of "inputs" and "outputs" "... because it tends to ignore the really important issues of the *composition* of growth in output, and the *distribution* of the fruit of growth"². Nevertheless, the proposal of "limited resources" in a steady state did not guarantee an "egalitarian" non-hierarchical society; hence, "...social and economic hierarchies would continue to exist."³.

In addition to the "growth" debate, some "conservationists of natural resources" want to reserve "the resources" of the ex-colonies for the privileged, wealthy "we" at any cost, even if the cost is human life:

To keep the high-consumption energy-intensive

¹ Ophuls, Ecology and the Politics of Scarcity, p.8

² Cole and others, *Opus cit.*, p. 10

³ *Ibid*, p. 207

urban-industrial system afloat, aid to underdeveloped countries must cease and the people be allowed to starve back to biological carrying capacity while we remain "affluent" by continuing to use their resources on a capitalist basis."¹

The above statement demonstrates that some authors "environmentally" minded and moved by "overpopulation concerns", want to see other people starving to death: precisely the people of the Third World. This trend of selective capitalist "environmentalism" -reserved for the privileged-, belongs to the same ideological category of Nazist-fascist thought which conceived the extermination camps of Adolf Hitler.

d) Environmental Neo-positivist Thought

Neo-positivist thinkers analyse society from the viewpoint of the natural sciences, assuming that "natural laws" are applicable to the analysis of social realities. One example, is the analysis of the effects on the "environment" of the technological process of "industrial society" under capitalist and socialist regimes, as seen by Jeremy Rifkin in his book "Entropy"². He bases analysis of society on a conceptual framework related with the Second Law of the new science known as "Thermodynamics":

The application of Newtonian mechanics to the study of thermal phenomena, which involved treating liquids and gases as complicated mechanical systems, led physicists to the formulation of thermodynamics, "the science of

¹ Devall & Sessions, Deep Ecology: Living as if Nature Mattered, p. 53

² Rifkin, Jeremy & Howard, Ted Entropy. A New World View., The Viking Press, New York, 1980.

complexity¹.

The physicists formulated laws of conservation of energy applicable to steam engines. The first law, means that we cannot create or destroy energy; all we can do is to change one form of energy (such as mechanical, electrical, molecular, chemical) into another form of energy. "Entropy" is the Second Law of Thermodynamics:

The term was first coined by a German physicist: Rudolf Clausius, in 1868. But the principle involved was first recognized forty one years earlier by a young French army officer, Sadi Carnot, who was trying to better understand why a steam engine works².

It means that the conversion of some forms of available energy into another forms *always* involve a dispersion of energy which become unavailable: from a stored, organized, and concentrated form of energy into a dispersed form characterized by randomness. The process of dispersion of energy known as "disorder" or "dissipation", is irreversible; that means, it is always happening forwards in time, is constantly increasing, and it could be measured in various degrees, since..."Entropy is a measure of the amount of energy no longer capable of conversion into work"³. Rifkin applies this law -also known as the principle of "dissipation of energy"-, to the analysis of the "technological-industrial" society. In his critique of the dissipation of energy in the "industrial society" he argues that...

If the Entropy Law were fully acknowledged, society

¹ Capra, The Turning Point, p. 59

² Rifkin, Opus cit., p. 35

³ Rifkin & Howard, Opus cit., p. 35

would have to face up the notion that every time we use part of the stock of available matter and energy it means two things: first, that one way or another, the individual, the institutions, the community, or the society ends up paying more for the disorder created in making the product than the value derived from the use of the product; second, less energy is available to be used by other people and creatures sometime in the future¹.

Firstly, Rifkin does not identify who are the "we" that "use part of the stock of available matter and energy": it could be a millionaire travelling in its exclusive private jet from Los Angeles to New York to attend a meeting with the managers of his corporation of gold mining in South Africa. For his trip he needs the energy provided by thousands of litres of non-renewable and polluting fossil fuels and a sophisticated flying machine. Or maybe the "we" means the old woman of Canoabito who had to walk ten kilometres to Canoabo each day in order to sell the corn bread that she made early in the morning, cooking with firewood; the reason of her trip is to save money to make the uniforms for her eight children to go to school. Secondly, it seems that Rifkin has not realized yet that his hypothetical and imaginary "...people and creatures sometime in the future..." are here and now: in the Third World already "...less energy is available to be used by people..." since in the First World, "...developed nations, with only one quarter of the global population, continue to consume four fifths of the global energy budget"²; and global consumerism

¹ Rifkin, Opus cit., p. 133

² Myers, Editor, The Gaia Atlas of Planet Management, p. 105.

continues because -for its perpetuation-, the patriarchal society requires high inputs of centralised and polluting forms of atomic, hydroelectric and fossil- fuel energy.

e) "Environmentalism": the Liberal-capitalist tradition and the Marxist-socialist tradition What is the meaning of "Environmentalism", according to the Liberal-capitalist and the Marxist-socialist frameworks?. Which assumptions, beliefs and values are involved in the "development" theory towards economic growth and expansion sponsored by both: capitalists and socialists? Which aims lead to the perpetuation of capitalist and socialist societies characterized by destruction, pollution, oppression of people -specially women- and nature? Why environmental damage is still considered as unavoidable by many and Nature continue being exploited by "entrepreneurs" and manipulated as a passive provider of "natural resources" to be "managed"?

While socialist economists reject the market mechanism, they agree with the capitalist economists that the overall economic environment is never depleted. As to where the new supply is supposed to come from, both capitalist and socialist economists assume that new technology can always find a way to locate and exploit previously untapped resources. The resource base itself is considered inexhaustible¹.

The above phrase is conveniently anchored in the manipulative concept of "...resource base..." which places Nature in a subordinate position, as a passive object to be exploited by both: the "socialists economists" and the "capitalists economists". There are

¹ Rifkin, Entropy. A New World View, p. 129

also two assumptions that are inter-related: one sees Nature as a provider of "natural resources" (raw matter) that need to be taken, processed (the more refined, the better) and consumed; from this assumption derives the technocratic notion that Nature is "something" that needs professional "managers" for its administration.

Capitalist and socialist societies have both the same managerial approach to Nature and the result is that both disperse energy and produce waste and pollution. I will argue that the liberal and neo-liberal theories, as well as the Marxist and Neo-Marxist theories which seems contradictory, are both based on two different versions of the same economic reductionism characterized by utilitarian and pragmatic "environmentalist" thought. As it will be demonstrated in the section on Eco-feminism-, both theories share the same logic of patriarchal hierarchy that perpetuates the oppression and manipulation of Women and Nature. Liberal-capitalist and Marxist-socialist societies are both based on industrial and technological growth and expansion which requires centralized and massive exploitation of non-renewable "raw materials"; these are processed and consumed at a faster rate than they are replaced until they become extinct. Capitalist and socialist economic "models" are "unsustainable" and their societies are imbalanced, unhealthy and in conflict. These anti-ecological trends have been critically reviewed by socialist thinkers adopting a hybrid of socialism with environmentalism, named: "socialist environmentalism".

Hence, two analysis are introduced. On the one hand, what are the "free-market environmentalist" arguments, assumptions and values of the neo-liberal New Right? What are the connections between the emerging "Green Business" and the political parties and movements known as "The Greens"? On the other hand, what are the "environmentalist" arguments of post-industrial neo-Marxist socialists?

2) Free-Market Environmentalism

"Free-Market Environmentalism" is an expression of New Right thought within the context of "Environmental Theory". Its arguments on "conservation and the management of natural resources" are guided by economic and political power and business interests.

a) Ideology of the New Right Following is an analysis of the New Right ideology. Although these arguments are analyzed within the New Zealand context, they are "universal" and could be also applied to any other country in the world. The "environmentalist" ideology of the New Right will be related with the process known as the "Resource Management Law Reform" (RMLR) launched by the Fourth labour Government of New Zealand in 1988. "Free Market Environmentalism" is based on four distinctive categories of New Right theory or

"schools" -also mentioned in Chapter II-, each one with its own pioneers, values, beliefs and assumptions¹:

- i) The "Anarchist-Capitalist" and the "Minimal State" school;
- ii) The "Chicago School" or "Objective Economy";
- iii) The "Austrian School" or "Subjective Economy" and,
- iv) The "Public Choice School".

Each "school" has developed its own arguments on: human nature and the rights of the individual, the state, as well as policing, justice and education. Although their internal differences, some of their main principles could be integrated and used as conceptual key elements for the identification of New Right thought in documents or in oral interventions. Beyond the differences between the "schools", New Right ideology must be seen in the context of the following "Five New Right Principles" as well as the mechanisms that permit this ideology to be implemented in the practice through political action of policy making:

¹ Green, The New Right, 1987.

For a Summary of the New Right Schools, see Appendix A.

Table 5. Five New Right Principles

"The Limits of Knowledge":¹ Individuals do not know the whole social reality, because their knowledge is partial and limited. Since individuals do not know what the social needs are, hence there is no need to be generous or altruistic. The market is the best indication of what we do has a social value or not, being the best indicator, the frequency or number of other individuals buying particular products or services.

"Aggregation of individuals and rational selfishness":² Society is the aggregation of multiple wills of individuals, each one pursuing her/his own motives, goals and objectives. Social decisions are voluntary exchanges between rational individuals which preferences must be aggregated taking into account the cost/benefit analysis before undertaking any project.

The "Profit Motive"³ It is the force that encourages the individual to action in order to make a return, for which: a) must satisfy a demand; and/or b) to cut costs. Without barriers to entrepreneurship and labour mobility, the profit motive and the price mechanisms will determine the overall coordination of the social system. Any government-state interference or regulation, such as subsidies, taxes, preferential or non-preferential trade barriers, will have a negative effect in the ideal, free-market system.

¹ See: Barry, Hayek's Social and Economical Philosophy, p.15; Friedman, Capitalism and Freedom, p. 200; Schotter, Free Market Economics p. 1-2.

² Schotter, Opus cit, p. 2

³ See: Flew, The Profit Motive, 1980; Simmons, Local Enterprise Culture in Resurgence, NO 129, 1987, p. 37;

Table 5 (Cont.)

"Process Orientation" It leads towards the limited and property-less state. This principle is in conflict with the "End-State Orientation", because important is the means, not the ends with no ethics or moral codes involved in the "process". It assumes that the processes between individuals and institutions are more than justified if they are reached "voluntarily" and by "mutual consent". The role of the state is seen from three different positions defended for particular New Right schools:

- a) The absolute dismantling of the state.
 - b) A minimal state to protect law and order and external enemies.
 - c) A state to set up policy and special legislation in order to protect individual freedom, individual self-direction and self-development.
-

The Rule of Law¹ According to which, the actual system of law, which establishes norms of conduct and "A prioristic" conditions, must be changed for a general framework -as less specific as possible-, that allow individuals to compete and to be open to competition for which they have to be "efficient" -in economic terms- in order to achieve their objectives.

¹ Barry, N. Hayek's Social and Economical Philosophy, p. 83.

For some New Right "schools", the state also could set up standards of minimum education and life conditions for its citizens. Important is the means, not the ends, with no ethics involved. It assumes -when judging the results of social institutions-, that the focus must be in the process through which they are determined; the institution can be justified if is voluntarily reached by the mutual consent of those involved, since: "...given the individualistic bias of the free-market argument, nothing that individuals enter into voluntarily can be bad"¹. The goal is to minimize the welfarist role of the centralized governments of the nation states all around the world and to pass public-social property into "private" hands of those few acting behind Corporations: New Righters know that they **are** the government.

b) The New Right and the New Zealand Resource Management Law Reform (RMLR) The following analysis of "Free-market Environmentalism" is based on the identification of the above "Five New Right Principles" in various documents. This ideology was introduced in the New Zealand environmental agenda in 1985, reaching its climax during the process known as the "Resource Management Law Reform" (RMLR). The RMLR was launched in May 1988 by the Fourth Labour Government as the review of ten major laws governing natural and physical resources, although five years earlier...

Following the publication of the World Conservation

¹ Schotter, Free Market Economics, p.5

Strategy in March 1980, work began on a Conservation Strategy for New Zealand. A discussion paper introducing the concepts of the World Strategy but applying them to the New Zealand situation was distributed last year...¹

...and one of its "Priorities for national action" included in objective (8) of the Conservation Strategy was, "Policy making and the *integration* of conservation and development"². On the contrary: the RMLR established "a-priori" the *disintegration* of "Conservation" and "Environment" for the public to participate under the rules of dualistic thought. Between 1986 and 1987 the Fourth Labour Government of New Zealand started to review "...the environment laws and administration in New Zealand. The Local Government Commission is identifying changes needed to our local and regional resource management agencies"³. As it will be demonstrated the government, adopting dualistic-oppositional thought, split the proposal of "Integrating Conservation and Development"⁴. The government review erased the "conservationist" conception of the "Nature Conservation Council" that -following the recommendations of the

¹ Nature Conservation Council, Integrating Conservation and Development, p. 5. Wellington, June, 1981

² Opus cit., p. 7 Italics used for better identification of concepts.

³ Department of Conservation DOC, promotional brochure New Zealand. September, 1988

⁴ Nature Conservation Council, Integrating Conservation and Development. A Proposal for a New Zealand Conservation Strategy, Wellington, New Zealand. June, 1981

"World Conservation Strategy"¹, had proposed "...the establishment of a Ministry of Conservation and National Development. This could have policy and coordinating responsibilities to ensure the integration of conservation and development objectives."². The government, on the contrary, ignored this recommendation. The following text, summarizes the dualistic - oppositional thought of the "Resource Management Law Reform" which conceptually separates "Environment" from "Conservation":

The Ministry for the Environment is coordinating a review of town and country planning, water and soil conservation, mining and environmental impact assessment. The Department of Conservation is looking at the management of our conservation heritage, our coasts, our natural areas and historic buildings and places³.

The above paragraph is expressive of a dualistic-oppositional thought which separates a unity into two major concepts: "Environment" which becomes alienated from "Conservation". One of the consequences of this rupture is that -for their implementation in the practice- they also have to be "institutionalized" in a separated way.

¹ International Union for the Conservation of Nature and Natural Resources (IUCN), World Conservation Strategy, published in collaboration with the United Nations Environment Programme (UNEP), the World Wildlife Fund, (WWF), the Food and Agriculture Organisation of the United Nations (FAO), and the United Nations Educational, Scientific, and Cultural Organizations (UNESCO). March, 1980

² Nature Conservation Council, Opus cit., p. 49

³ Department of Conservation DOC, promotional brochure September, 1988.

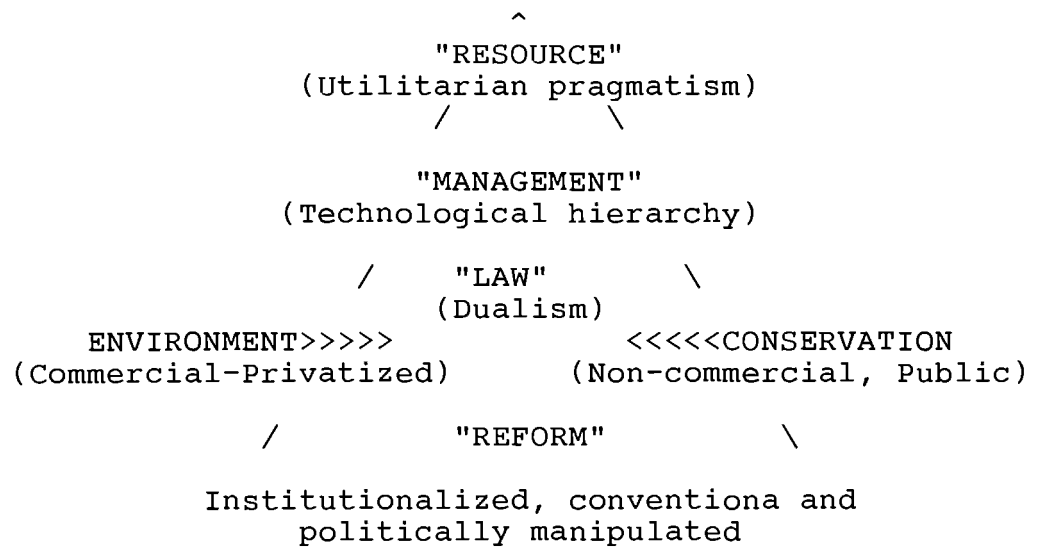
On the one hand, the isolated concept "Environment" was then easily "opened" to commercial objectives, to the privatization of public resources, to the sale of public assets and to negotiations for and by the free-market forces. To facilitate the process of marketing the "environment", the "Ministry for the Environment" was established as a political body, mainly for decisions on environmental policy making. On the other hand, the isolated concept of "Conservation" -which is considered "non-commercial"-, could be now easily relegated to a position of secondary importance with limited control on the overall natural environment, functioning with minimum staff, minimum budget and minimum territory to "conserve".

The conceptual separation "Conservation" (either-or) "Environment" was very convenient for the New Right forces in New Zealand; the main purpose of the above exercise on intellectual dichotomy is to facilitate the ideological penetration of the New Right "free-market forces" at the highest levels of policy making. "Environment" is implemented in the practice by the "Ministry for the Environment" whose main role would be to review and reform environmental policy and to serve as an ideological instrument of the global financial New Right. The Ministry would also play the role of a "mediator" between "Free-Market" and "Conservation" forces. This role of the "Ministry of the Environment" was defined in many "RMLR" discussions as the "necessary

advocating role" of the Ministry. At the same time, the Ministry of Tourism and the Ministry of Commerce -also manipulated by New Right interests-, started to have more power of decision on environmental matters than the Ministry of the Environment itself. The primal and dominant concept "Resource" -imposed in the public participation through the RMLR-, is also mercenary, pragmatic and utilitarian. For the New Right partisans - moved by the "profit motive"- it was crucial to an environmental legislation based on their principles of "property rights" for them to use "resources" in any ways that secures their gains. The legislation had to give the "free-marketeers", opportunities to exploit "resources" (renewable or non- renewable) with minimum or no government intervention and letting the free-market forces to operate. The regulatory process in the RMLR Law Reform is seen in the following pyramid of dualistic-oppositional thought:

Figure 4

Dualistic Thought of the Resource Management Law Reform



The dualistic and oppositional thought that isolated the concept "Environment" and alienated it from "Conservation", also decided that discussions on environmental issues had to include overriding New Right principles of "property rights". The ideal New Right "Law" of RMLR had to minimize government intervention and to get a loose framework legislation. One that - according to Hayek's "Rule of Law"¹ would be as less defined as possible, except on issues of "property rights."

The New Right ideology was systematically introduced within the internal organization of the RMLR through official representatives of Treasury, the Business Round Table and the Center of Independent Studies as well as Government-staff specially indoctrinated in "free-market environmentalism". It was also introduced through multiple submissions of the business sector. One of the main objectives of the defenders of the New Right was to oppose "green" principles of "ecological sustainability" and the "rights of future generations" in the "Task Groups". These opposition was expressed during the RMLR by many corporations, such as the "British Petroleum". They raised monetary values against conservation values considered by them as useless, anti-economic and romantic philosophy :

Vague philosophical concepts such as

¹ See New Right Principles

'sustainability' and 'the needs of future generations' should be avoided. There is a cost of uncertainty through delay and resolution of uncertainty... ..the Review which in our opinion focuses too heavily on matters of conservation and too little on controlled sensible economic resource management¹.

Here we see the contradiction between "Environmental Dominion" and "Environmental Stewardship". Hence, it is predictable that -if there is a BP oil spillage in New Zealand, the BP -guided by "sensible economic" "values"-, will pay a fine and will continue polluting the environment. However, New Right thinkers in the U.S.A. have found the solution which is to give the "Free Market forces" total freedom and "...they have come with the idea of allowing companies to buy and sell the "right" to pollute as part of a plan to encourage them to clean up their operations."²

The Fourth Labour Government organized the RMLR in such a way -that the participation of the "New Right" was ensured in the first place at "high levels" of decision, while "public participation" followed, at "low levels" of decision. For example, in the "Public Participation Task Group", two members of the Business Round Table and one -representing Transnational corporate interest in gold mining- with another eight people,

¹ British Petroleum BP New Zealand, 1989: Submission to the RMLR, p. 4-6

² Thompson, Giving Greed a Chance. Is the Right To Pollute an ecologically sound idea? , p. 41 In: "Time", February 12, 1990

advised on the objectives and principles of "public participation" in RMLR and decided who should be involved -or not-, in decision-making on environmental policy. They continued influencing policy making until the end of the year. At the beginning of the RMLR process, Treasury and official representatives from other ministries - specially trained in New Right ideology- were already well established in the internal organization which was going to promote the campaign of RMLR, asking for "Public Participation." The New Right ideology penetrated and controlled the RMLR process in *Phase 1* (April to June), through Treasury Officials in the "Core Group" and "Task Groups". Members of the Business Round Table and of the Center for Independent Studies participated in the "Task Groups".¹ In the discussions and submissions Treasury introduced New Right Theory of "Property Rights" and the theory of "Externalities".

New Right thinkers, developing the economy theory of "Property Rights" against the state, have raised a biased critique of the harmful side-effects of commercial transactions such as pollution, anti-social behaviour, vandalism, arson and over-exploitation, now irresponsibly named by the economists with the inoffensive term: "externalities". This theory -in their opinion-, is so complicated, that..."We need at least three generations

¹ Source: Ecological Organizations of New Zealand ECO, Internal Newsletter, May 1988.

to explain the externality of the passage of capital from one generation to another."¹... They also argue that negative "externalities" are a direct or indirect result of state ownership, public owned resources and public enterprises because they tend to focus on the physical ownership itself, and not on the right to use it; public property has brought these abuses. They assert that total allocation of property rights to "private persons"-which in the reality means "corporations"-would solve the problems of government mismanagement and of the land, water and forest, open to public abuse because do not have a private owner. Private (corporatized) property will bring wise management²:

Thus for the Good Society, we need a combination of economics, ethics and politics: first, an *economically* efficient selfishness a la Adam Smith in the Market Place; second, an *ethical* search for justice to guide the formation of individuals' preferences as between different governmental policies; and third some humdrum *political* rules of voting to choose between any resulting conflicting views about such policies."³

With this biased logic the New Right thinkers - developing the theory of "externalities"-, do not mention the chaotic effect of over-exploitation and destruction of natural resources caused by unethical private enterprises. On the contrary, they assume that "...the

¹ Maedae, Opus cit., p. 23

² See the discussion on Coase, 1960 and 1964; Pigou, 1929; and Posner, 1972, 1981. In Part 1, "Friedman and the Chicago School" : The New Right. The counter Revolution in Political, Economic and Social Thought, p. 87-88

³ Meade, The Theory of Economic Externalities. The Control of Environmental Pollution and Similar Social Costs p. 52-53

choice of structure of activities by the chance of a *laissez faire* market mechanism may not involve any serious social loss..."¹. However, the fact is that private property have benefited at expense of public property and both are inter-connected, growing at expense of Nature. A hierarchy of unethical and ecologically ignorant people are rampant in managerial positions in both, the public and the private sectors: in the public, they are moved by the "vote motive" and in the private, by the "profit motive".

c) Free- Market Environmental Thought

The following analysis is based on the identification of the five New Right principles enunciated above². Maybe, the first evidence of infiltration of the above New Right ideology in the New Zealand environmental agenda, started with a submission of "The Treasury" to the "Environment Forum 1985". The "Forum" worked through a summary of 16 environmental agencies from 13 countries and invited different government departments to write submissions related with the environment: 17 departments participated. It is at this point, when the ideology of the New Right is clearly expressed for the first time, through a 13 pages submission³. Inspired by the Hayek's doctrine on

¹ Ibid, p. 72

² See (2) (a) Ideology of the New Right

³ Secretariat of Parliament House, entitled: The Treasury. Environmental Policy: the Proposed Ministry For The Environment, Appendix 16. Wellington, 1985.

limiting the discretion of public officials by general rules or "ideal frameworks", Treasury strongly criticized the "control function" and the major role of the Government in "managing access to the environment", as it was proposed by the Environment Task Group. It proposes instead, a "hands off" position for the Government in order to let ...

...the legislative and administrative framework yield the appropriate private incentives for individuals to make nationally correct decisions about the environmental aspects of economic activity¹.

The "ideal" framework Treasury was proposing was not an original intellectual invention of their own, but Hayek's "Rule of Law", blended with Friedman's monetarist doctrine. "Economy" is an over-ruling force, totally independent of other disciplines and not related whatsoever with social, political or environmental sciences.

Treasury split the integration "Conservation and Development" and manipulated the concept "values" for a biased glorification of "Economics":

Economics has advantages over other disciplines in that when other disciplines are required to choose between alternatives resource management strategies they find no values to draw upon which are inherent in their theories².

But does "Economics" of Treasury have other values different from the "profit motive"? Following this

¹ Opus cit., p. 2

² Secretariat of Parliament House, Opus cit. p.6

arrogant argument of economic reductionism and in accordance with a more radical anarchist-capitalist position, Treasury also considers legislation, a useless social construct: to legislate in relationship to the environment is redundant, because negotiations between private owners are more than enough to keep the social and environmental order.

In the following paragraph, Treasury adopts Hayek's "Theory of Law" and its principles of a "Framework Legislation"; the law must be as least specific as possible:

The Government's role is to establish a legal framework on environmental and natural resource issues within which private participants can operate¹.

It also introduces the typical New Right criticism of public institutions as unable to perform their functions efficiently, due to the "economic ignorance" of their bureaucratic functionaries that makes them "inferior".

On the contrary-, (and this is New Right catechism), the private institutions, being excellent, efficient, organized and non-bureaucratic, are "always" superior to the public institutions:

In the areas where legislation is considered necessary, effective use can be made in some cases of economic instruments based on market-type mechanisms. Although the proposed ministry would not necessarily initiate most environment/economic legislation, it must have the technical capacity to contribute to this area².

¹ Ibid., p. 10

² Ibid., p. 10

Hence, the "technical capacity", the "economic instruments" and the "market-type mechanisms" -for the Ministry of the Environment to become a machine manipulated by the new Right-, all would be provided by "sapient" officials specially trained in the New Right economics and politics, as loyal free-marketeers. They would have to be appointed in the new Ministry of the Environment in order to illuminate the ignorant and to introduce the necessary "input" of New Right doctrines in policy making as well as in its implementation and administration for achieving profitable "outcomes".

In this document, which does not distinguish between "renewable" and "non-renewable" resources, Treasury also adapts Hayek's "rules" on using...

...a particular resource and then abandon it when it is no longer profitable, and argues that to prevent the spontaneous process of the market operating through deliberately contrived conservation plans will lower incomes all round¹.

This argument is based on the assumption that what benefits the rich elite will benefit society as a whole; being the profit motive -of exploiting Nature as much and as soon as possible-, the overriding force behind the exhaustive use of "a particular resource" until is nothing is left. In the following paragraph Treasury, copying Hayek's position of use and deplete "resources", praises again "Economics" to justify greed. To make the privileged elite conveniently "invisible", Treasury uses

¹ Barry, Hayek's Social and Economical Philosophy, p.117

the generic term: "the generation depleting these resources" to define those who -in the reality are-, the elite of owners and managers of multinational corporations motivated by profit :

Economic criteria for rates of resource-use may lead to (current) decisions to deplete non-renewable resources. Economic analysis suggest that future generations might not necessarily be deprived by these decisions since, in principle, the generation depleting these resources bequeath in their place a level of capital stock and technological know-how which would substitute¹.

The above paragraph is an example of paradoxical thought, because:

a) The "...technological know-how..." to deplete a "resource" would be worthless **without** the "resource";

b) "...that future generations might not necessarily be deprived by these decisions..." means that the only decision they could take in the future is to exhibit the technological "know-how" in a museum of "ecological crimes";

c) The actual "generation depleting these resources" must be related to the only ones able to deplete a resource, which are the members of the privileged elite engaged in international business exploiting Nature for profit.

d) The "level of capital stock" accumulated by these depleting elite would be kept as their exclusive property, including their own "future generations" born already rich within their families.

¹ Secretariat Parliament House, Opus cit., p.7.

The ideologists of Treasury opposed regulatory mechanisms of prevention by the Government, inspired by the best tradition of the school of anarchist-capitalism. They are not concerned on how *not* to pollute but in how *let* pollution happens within the free-market rules:

The approach of making polluting expensive to create (or resources expensive to deplete) has a number of advantages over the regulatory system¹.

Which gives the right to pollute to those who can afford to pay for it, because it is cheaper to pay fines to the Council than to change the technology or to close the industry. Overriding monetary values and the New Right principle of "Individual Selfishness" adopted by Treasury is a very useful rationale to benefit individuals acting behind corporations which can pay what ever is asked, in order to have the exclusive benefits of the "environmental resources":

The concept of exclusiveness and rivalry are useful when considering environmental resources. If a good is exclusive a price can be collected for its use. That is those who don't pay can be excluded from its use².

According to this theory on property rights, Nature is something to be appropriated and used exclusively by an elite that can pay "a price", because only a few individuals are free to go shopping for whatever, whenever and wherever they want:

The method of restricting the use of environmental resources by setting a price for them can only be used if access to resources can be restricted to those willing to pay the price. In order to restrict access it may be necessary to make the resource exclusive by re-defining the "property rights" that govern access. Nearly all our

¹ Secretariat Parliament House, Opus cit., p.9

² Ibid., p.6

resource problems revolve around the definition and distribution of property rights¹.

Which is very convenient for the rich elite, since the economic basis of the New Right must be found in the impersonal property of international enterprises, acting like as if the corporation is "an individual" also called: a "person". This is the major legal mechanism for the protection -and perpetuation- of individuals acting behind corporations. Currently, the New Right language of systems theory has been conveniently applied by the legislator in the "new" Resource Management Bill: "outcomes"² "accountability"³, and the "person", meaning "...a corporation sole, and also a body of persons, wether corporate..."⁴; these concepts are an indication of the ideology of those who wrote the Bill.

d) The implications of "Free-Market Environmentalism"

The above "environmentalist" ideology of Treasury is based on the principles of the "Environmentalism Technocratic" approach, based on the assumptions that "humans" have the right to "organize" Nature for their own purposes, that Nature is a stock of "resources" for "humans" to use and that Life is a "resource" to be

¹ Ibid., p.7

² Resource Management Bill. 224-1, p.i .
V.R.Ward, Government printer. Wellington, 1989.

³ Ibid, p. ii

⁴ Ibid, p. 13

transformed into a commodity. Due to the Fourth Labour Government, in defense of the free-market economy, "natural resources" of New Zealand are now more vulnerable to the monopolistic control of an internationally powerful New Right elite, buying Nature through their corporations -named as "person"-, for their exclusive use and profit. It is too late to react, because the new legal structures are being already established; their aim is to diminish the power and control of the central government towards the "minimal and property-less state". The privatization of Nature will be accelerated with the devolution of administrative responsibility to local authorities -which are also manipulated by the overriding free-market forces.

The "revolutionary" ideology of the New Right is immersed in the context of a totalitarian, violent, unjust and hierarchical system of the global economy: they base their wealth on the exploitation of People and the monopoly of Nature. The New Right economy is as totalitarian as the national, state-ruled, collectivist or socialist economies they criticize. They are worse, because for its own survival, the New Right elite need centralized masses of consumers manipulated by the propaganda and controlled masses of re-trained workers, willing to serve under their new high-tech computerized enterprises to produce goods and services on a global scale.

The most immoral justification of the New Right is to sustain that the super-rich elite -if is to be kept in its exploitative position-, will create jobs in their enterprises and hopefully, "the poor", will also have "better" standards of living. On the contrary: the ideal employees of the New Right enterprises are disunited workers, scientists and technocrats who are -not only passive and submissive-, but also ideologically brain-washed in order to believe that the enterprise "belong" to them.

The workers -if any are left-, are specially trained in order to be ideologically committed and unconditionally due to the corporate enterprise, if they want to keep their jobs. The "Trade Union Reform" sponsored by the "realistic economy" of the New Right, involves: not to have the right to force others to strike, freedom of not to associate with the Union, total market flexibility to rise or lower wages, and changes to the legislation in order "...to restore control of trade Unions". For the New Right it is also important the "...introduction of no-strike contracts for workers in essential services."¹

In the "New Right Empire", successful economists, politicians and journalists are like an adoring court of the new aristocracy, keeping the public informed of the

¹ Green, OPus cit., p. 204-207

wonders of the free-market "revolution". These professionals work hard (but they never will be multi-millionaires themselves), in order to keep their aristocratic bosses in their towers of glass and concrete, living a life-style of exclusive resorts, mansions, yachts and aircraft. Whereas surrounded by beauty, comfort and privacy, the aristocratic New Right need in turn, to keep a grey, centralized cheap and average system of urban masses of consumers. The neo-liberal "neutral" and "high philosophical" discourse centered on "corporatized-individualism", need in practice a concrete-real world of money; a world of consumers continually shopping in their enterprises for the average-mediocre goods they produce; useless objects -glorified by advertising- that have to be constantly replaced or repaired. The anarchist-capitalists also needs "clients" for their free-marketeer education, privatized recreation, and chemical health. Some of their most important targets are the privatization of water and sewage, and to replace the state funded police with private protective agencies and detectives which will be "...funded by customer's voluntary payments..."¹; also the new Right is planning to replace the current court system with the introduction of a total private arbitration system, according to which, the richest will get more "justice".²

¹ Green, Opus cit. p. 40

² See Green, Opus cit. p. 38-40

e) Summary of Free-Market Environmentalism

In summary, "Free-Market environmentalism" has established the need of a technocratic elite of specialized "managers" of "natural resources", conveniently "trained" at the university. The managerial control of Life has also established that "Conservation" is "non productive" and must be separated from "Environment" which is "productive". Hence "Environment" must be open to free-market forces for its "development" controlled by "humans", and for the satisfaction of "human" needs. Without revealing the hierarchical relationships of between "humans", individuals manipulating the economy behind Transnational Corporations, need to keep the dominion over Nature and the pillage of Third World's "natural resources". They also need the accumulation of capital produced in the Third World countries by the cheap labour of their people, surrounded by masses of starving People. This exploitation produces the necessary surplus to feed their avarice and keep their exclusive global "private property rights". The "Environment" becomes a commodity to be exploited and manipulated for "productive" purposes which is the objective of economic "development" and growth moved by greed and the profit motive. The selfish assumptions and the monetary values of the "Anarchist-Free-Market-Economy" of aggregated individualism within corporations, is the "philosophy" of the New Right society.

f) "Green Business" and the "Environmentalists Greens"

The conception of a new theory of Real Ecology Adult Learning not only confronts the difficulties of challenging the theory and practice of the global financial New Right which I have defined as "Free-Market Environmentalism". There is another challenge still more difficult than the above: is the neo-liberal "green trend" engaged in the "conservation of natural resources" and its conceptual connections with the global financial and political system. These connections between the "environmentalist greens" and the global financial forces must be further studied because "Environmentalism" in the 1990's has become a good strategy for the "green and natural" politicians "to make votes" and for the free-marketeers to "make money".

The idea of "saving the world" New Right style is politically focusing on the "ozone layer":

If an example is required, we should perhaps not look beyond's Britain's Prime Minister Margaret Thatcher. Although she is regarded as the architect of Britain's industrial renaissance and seems a unlikely convert to so-called conservationist policies, she brought a personal commitment to the recent conference she hosted on the threat to the ozone layer. Her professional training, of course, was as a research chemist. She has thus been able to see, more readily than most, what other scientists are warning us about¹.

¹ Fry, A., A Case For Quicker Change, Editorial, "The Listener" Volume 124, NO 2566, 1989
See also: Ansley, G., A hot recipe for preserving the Earth, p. 2. "The Star", Friday, May 26, 1989.

The glorification of a "green" Mrs. Thatcher by the journalists -as if she were "saviour of the planet"- is similar to the actual glorification of the "green" politicians "saving the Antarctic" or "saving the ozone layer". The "ozone layer" is just one in the endless and overwhelming list of "eco-crimes" hierarchically imposed on a global scale. The depletion of the ozone layer is mainly due to two commercialized inventions: the technology of chlorofluorocarbons, or "CFCs" which started in the 1920s and has been intensively used in different multi-billion dollars business as a cheap cooling fluid for refrigerators, in air conditioning, as a propellant in aerosol sprays and in many other industries. Also the "halons technology", developed at the end of the Second World War for fire extinguishants. Both contains "Chlorine" and "Bromine" which act as catalysts, interfering with the delicate balance that keeps intact the ozone molecule of three atoms of oxygen. Due to the interference of Chlorine and Bromine, ozone is converted to oxygen. The consequences are fatal for humanity, because the ozone layer is like a filter to protect our planet from lethal radiations from outer space: : a) an increase of ultraviolet radiation, in particular UV-B, that causes skin cancer; b) the destruction of phytoplankton, the basic source of energy and food in the sea ecosystems; d) plant damage by scorching the leaves. e) Health of animals and humans could be seriously affected. In May 5, 1989, the "Helsinki Declaration on the Protection of the Ozone

Layer" was issued in order to reinforce the "Montreal Protocol", "the world's first regulatory agreement to protect the ozone layer". Although all over the world, production and consumption of CFCs stopped today-, following the recommendations of the "Montreal protocol on Substances that Deplete the Ozone Layer" to reduce the emissions reductions worldwide, the damage will still be there for almost a century¹. This global catastrophes are manipulated by the politicians -as Mrs. Thatcher- for improving their "green image" as if they were the "saviours of the planet."

Not only the politicians have found the advantages of a "green image". For example, the managing director of the Australian "Paper and Pulp International Ltd." (PPI):

...is one of a growing army of entrepreneurs scrambling for seats on the economic rollercoaster that is the business (as well as political) "greening" of Australia².

This "greening" trend of capitalist "environmentalism" has become fashionable and big business are now advertising their products as: "greenie" (meaning biodegradable, recyclable) and "natural" (meaning cosmetics, food, carpets, and even cars). For increasing their profits, "The Green Capitalist"³, have adopted slogans such as "save the world" "environmental

¹ Pearce, Turning the Heap. Our Perilous Future in the Global Greenhouse, 1989.

² Juddery, B. Making Money From Protecting The Environment, In "Australian Business, July 5 1989, p.59

³ Is the title of a book by Elkington, J. and Burke, T., 1989.

friendly" or "taking care of you and the environment" which demonstrate that:

...the world's environmentalists no longer have a monopoly on environmental thinking. Indeed, later chapters explore the ways in which leading companies in the oil industry, the chemical industry, to take just a few examples, have adapted to environmental constraints and are beginning, in many cases, to exploit environmental opportunities¹.

The above phrase demonstrates that new exploitative liberal thought in the 1990's has discovered "environmental thinking" which leads "...to exploit environmental opportunities..." within the already over-exploited neo-colonial system. In the above paragraph, to use the example of the oil industry and the chemical industry is a hypocritical non-sense since these industries -besides the atomic energy industry-, are not only the major causes of global destruction of the eco-systems, but the main basis of elitist power. Corporations are now using their convenient "environmentalist images" through partial reforms such as advocating unleaded petrol, a guarantee of business success².

Other areas of business interest -for example-, in the European Community, have found that it is profitable and convenient to fulfil the aim proposed by the "greens" -which is "...to improve the quality of life..."³

¹ Elkington & Burke, The Green Capitalist, p. 23

² Cope & Carton-Kelly, *Opus cit.*, p.71

³ Porritt & Winner, The coming of the Greens, p. 9

including the adoption of:

...more than 100 environmental directives -on matters ranging from the level of toxic emissions from combustion plants to the quality of drinking and bathing water- that are being, or about to be enforced in the UK¹.

The popularity of the "greens" -political parties and environmental groups-, has served as an advertising campaign for the promotion of "green business" making the rich wealthier. The "environmental" position of big business is misleading the public opinion towards the assumption that to be "friendly with the environment" and to "care" for Nature, means that we live in a "friendly" society where everybody -including their exploitative companies- are caring for everybody else. Royalty, millionaires, Hollywood "stars" and "socialites"² are now "green".

The flourishing of "free-market environmentalism" in the decade of the 1980's has been based on the popularity of the "environmental green" movement. Hence, it is important to uncover the ideological and the political implications of the movements known as the "The Greens" which are political parties and groups mainly proliferating in the First World countries. These are characterized by the tendency to use of "neutral" conceptual frameworks which make invisible the system of oppression in the capitalist countries where they exist

¹ Carton-Kelly, Opus cit., p. 66

² Ibid, p.66

and grow. One of those neutral arguments is centered on the class-free and gender-free concept of "humans":

The Greens present a promising political strategy because they encourage the cultivation of personal ecological consciousness as well as address issues of public policy. If the Greens propagate the biocentric perspective-the inherent worth of other species besides humans- then they can help change the current view which says we should use Nature only to serve narrow human interests¹.

...as proposed above, the cultivation of the "biocentric perspective" makes "invisible" the hierarchical roots of society. Using generalized concepts such as "humans", and "we", the above phrase does not distinguish between the polluting effect of a "human" home-gardener who sprays a herbicide in the backyard, from other "humans" such as the owners and managers of petrochemical corporations. These "humans" are manufacturing, transporting, advertising and selling billions of tons of banned poisons all over the world, while making profit.

3) Socialist Environmentalism: "From Green to Red"

1990 is a decade of proliferation of fundamentalist doctrines: religious, economic, political, social and environmental; each fundamentalism is competing in order to be the most popular, to have more power and to prevail over the others:

Only on the Marxist-Leninist Left are the faithful

¹ Devall, Deep Ecology. Living as if Nature Mattered, p.9

in disarray, with none but the gerontocracy that runs China and zealots like the Khmer Rouge in Cambodia and Sendero Luminoso in Peru standing firm against the winds of revisionism¹.

Firstly, Marx-theory must be differentiated from "Marxism". Marx-theory has been considered by many people, specially intellectuals, the only way to be certainly "revolutionary" and has been elevated to the category of fundamental truth. One example is the dialectic-historical relationship society-nature:

...Marx conceives of human nature as social relations, and these social relations are in his view simultaneously the relations of production... These concrete relations of production are always organized around the development of the *forces of production*. This refers to all the means that people possess with which to influence nature in order to satisfy their needs².

This implies that humans transcend Nature and utilitarianism. The relationship Human-Nature is mediated through the means of labour and the instruments of production, in order to transform the "raw materials" into "products" for human consumption. The following conception of Marx reveals his sexist biases in the analysis of the relationship "man"(he-his-himself))- "nature"(she-her); for an easier identification of his sexist analysis, I have included italics:

Labour is, in the first place, a process in which both man and Nature participate, and in which man of *his* own accord starts, regulates and controls the material reactions between *himself* and Nature. He opposes *himself* to Nature as one of *her* own forces setting in motion arms and legs, head and hands, the natural forces of *his* body, in order to appropriate Nature's productions in a form

¹ Swift, Fundamentalism. Reaching for Certainty, p. 6
In: "The New Internationalist". N) 210. August, 1990

² Tolman, Karl Marx, Alienation, and the Mastery of Nature, p. 63

adapted to his own wants¹.

For Marx, Nature -identified as female- is irrational, having to be "controlled" by the rational "man". The relationship becomes one of his command and of her obedience and -within the socio-historical context-, Nature becomes an instrument of labour. That "He opposes himself to Nature" through labour-, implies command, dominance and superiority of "men" over Nature. The relations between humans becomes "relations of production", and society becomes a dualistic entity of "economic base" and "ideological super-structure", determined by the "economic base". The dialectic relationship between the "productive forces" and the "relations of production" and the succession on time of different socio-economic systems, has to be studied through "scientific" historical and critical analysis. The dialectical separation under capitalism of ownership of the means of production and the producers or workers and the resulting conflict between social classes, is seen as a permanent struggle for the control of the means of production: that means, as a struggle for "liberation" from capitalism.

However, Marxist analysis of "liberation" or "emancipation" not only impedes a real conception of freedom of hierarchy beyond the constraints of history

¹ Marx, Karl, Capital, A Critique of Political Economy. Edited by Frederick Engels. The Modern Library. New York. U.S.A. 1906. p 197.

and economic determinism but it also imposes the notion that the "working class" is the ultimate revolutionary force. Marx assumed that the workers will change the capitalist basis of production towards a transitional socialist society and -finally- towards the communist society with the abolition of the state and of private property. The conception of Marxist "liberation" is a step-by-step process: from capitalism to socialism, and from socialism to communism. The following phrase is not only a good example of the oppressive nature of Marxist ideology: it is rich in biased concepts that express managerial, hierarchical and oppressive thought, such as: "operative"(conduct, direct, manage); "management", "subordinated", "controlled", "higher"and "authority". Besides, there is an emphasis on "centralism" of the "whole", "entire" economy. I have included italics for better identification of these concepts. Here, "socialism" is the historical transition to the ultimate communist "equalitarian" society of workers "self-managing" the economy (that means the "basis" of society), through a centralist hierarchy in which...

Technical *operative management* is *subordinated* to them and *controlled* by them. ...*Central* worker's councils in the enterprises send their delegates to *higher-level* bodies of the whole branch and of the entire economy. At each level the self-management body is the *higher* authority responsible for the development and implementation of policy, and coordination among relatively autonomous enterprises¹.

¹ Harris, Kiernan & Miliband, A Dictionary of Marxist Thought , p. 437. Edited by Tom Bottomore.

The above assumption that "self-management" is the ultimate stage of emancipation of the conditions of wage-labour in a communist class-less society, implies a notion of hierarchical "liberation": self-management will be possible in a system of centralized "self-managed workers" ruled by a "higher authority". "Liberation" is understood in the sense that the means of production - inherited from the capitalist system-, will be socialized and that the workers will be able to "self-manage" (themselves). However, "emancipation" is conceived as authoritarian "freedom" since the administration of "liberation" is the responsibility of councils and assemblies of workers elevated -by whom?- to a hierarchy of levels where "control" and "subordination" still persists; the concept of "higher levels" implies the concept of "lower levels". There is also lack of ecological consciousness, since the hierarchical system of collective "freedom" workers-style, embody the notion of:

...organized imposition of human control over both nature and the social condition of production: "the full development of human mastery over the forces of nature as well as humanity's own nature"¹.

This notion -utilitarian and pragmatic- continues being used by Post-Industrial socialist thinkers to build up "green environmentalism". The *certainty* of Marx-theory, has been constantly reviewed by many thinkers who try to accommodate his doctrine to other doctrines or to

¹ Harris, Kiernan, & Miliband, Opus cit., quoting *Grundrisse* Notebook V Penguin Edn., p.488

changeable practice. In the process, Marx-theory has become "Marxism" which -until recently- have not taken into account a theory of patriarchy¹ based on gender analysis.

The following analysis is concerned with environmentalist thinkers which arguments demonstrate the underlying set of concepts, values and assumptions that characterize "Socialist Environmentalism" which continues the Marxist-socialist tradition. However, there is an internal contradiction between the followers of "From Red to Green" and those followers of "From Green to Red" thought. As it will be analyzed, the socialist framework is "from Green to Red" because: "...it is not the left which should be turning green but environmentalists who should become red."².

The "social environmental" arguments of the socialist "left" in Britain are in opposition to the liberal and conservative ideology of "green" environmentalists in defense of "nature" and "conservation". For example, Joe Weston reacts in opposition to those environmentalists -labelled by him as "middle-class"-acting in defense of "nature" but without concern for the "environment" which is defined as the "...social, political, economic and physical world in

¹ Weiler, Women, Teaching for Change, p. 23

² Weston, Red and Green. The New Politics of the Environment. Introduction, p. 2

which we live."¹. On the contrary, the children of the working class, -like Weston defines himself-, "...recognize that through human activity "nature" is changed."². The "human activity" he is referring to, is the Marxist conception of "labour" to transform "nature" for the satisfaction of material needs: under the capitalist system "labour" becomes "estranged" under private property and "...posses the essential properties of a commodity."³. Although his critique is against capitalism, the needs of the workers are neither satisfied in the socialist system. Workers are victims not only under the capitalist system but also under the Soviet system and in the Third World⁴.

Firstly, this gender-blind analysis of the working class does not establish the differences between the white male workers of the First World and the brown, yellow and black women workers of the Third World. What is "poverty" in the working-class neighbourhoods of London can not be compared -in any manner- with the penury and misery of the working class living in the slums of South American cities, for example. The "working class", is not a revolutionary force. On the contrary,

¹ Weston, Opus cit, p. 2

² Ibid, p. 2

³ Tolman, Karl Marx, Alienation, and the Mastery of Nature, p. 64 In: "Environmental Ethics" Volume 3, Number 1, Spring, 1981.

⁴ Weston, Opus cit., p. 4

the working class serves to perpetuate the oppressive global and national systems of centralized economy under capitalist and socialist regimes -both ruled by patriarchal dominant elites-, holding political power.

There is a contradiction between the socialist -who still believe in the "red" values of the "Internationalist" union of the workers or "red masses"-, and the individualist "greens" in favour of ecological reductionism who "...argue that it is ecology or "Nature" which shapes the social world."¹. On the contrary; adopting dualistic thought, "socialist environmentalism" assumes that "it is the social world which shapes and determines the physical"². For the "environmentalist socialism", "society" is elevated over "nature" which is seen as an obstacle, because: "...we choose our environment rather than have it imposed upon us by "nature"³. Hence, this dualistic thought bring as a result the opposite argument: of human imposition over Nature. For the "environmental socialist", actions in defense of a "sanctuary" of wildlife or dumping plastic bottles in front of Parliament, are just "cosmetic" measures. On the contrary, they assume that the reality of the poor slums in industrial Britain are more important issues to fight for: such as poor housing,

¹ Ibid, p. 2

² Weston, Opus cit., p. 2

³ Weston, Opus cit., p. 14

"...noise, violence, danger and poverty."¹ which are the environments of the working class.

The "environmentalist socialist" argument separates two groups: the people working "in the productive sector" with concrete material needs and the middle-class "greens" who belong to the "non-productive sector": this is the reason why the "greens" are moved by "non-material values" such as spirituality, pluralism and individual rights. "Environmental socialism" is an intellectual effort to criticise any conservationist intentions of the "liberal-capitalist green" politics in favour of "nature" as "...something to enjoy and protect,..."², and to oppose neutral "green" arguments that make the capitalist system invisible, behind the "neutral" image of the "industrial society". What is needed is "...to take up issues of more relevance to ordinary working people..." , to build up a "social environmentalism" for the working class, and to raise issues which must be relevant "...to the mass of people"³. This arguments are based on the Marxist assumption that the working class is the only "revolutionary" force to overthrow capitalism.

The proposal of a "mass movement", the "revolutionary" project "From Green to Red", is aimed at

¹ Ibid, p. 13

² Weston, Opus cit., p. 14

³ Ibid, p.5

"...to increase their material wealth so that they can escape from the environment imposed upon them by poverty."¹. Although there is no explanation on how the "material wealth is going to be achieved", neither the description of what "material wealth" means. It is clear is that "socialist environmentalism" does not sympathize with the "...small-scale communities which are organized both cooperatively and democratically..."² proposed by the "greens". However, there is no indication of how the society would be organized according to the environmentalist proposal. The model predicted is that the "mass of humanity", "...be more red than green"³. Neither Weston gives an indication of what type of socialism he agrees with. This ambiguity makes it very difficult to visualize his "socialist environmentalism", because the history of socialism:

...it is a history not of a fraternal plurality, but of rivalry and antagonism. The battle lines have changed (Marxists versus anarchists, collectivists versus sindicalists, reformists versus revolutionaries, communists versus social democrats, Troskyists versus everybody else...⁴

Marxist theories are used in the practice as the foundation of patriarchy in the socialist world. That the Marxist theory serves to justify the perpetuation of the hierarchical oppression of Nature and People, specially

¹ Ibid, p. 28

² Ibid, p. 24

³ Ibid, p. 29

⁴ Wright, Socialisms. Why Socialists disagree an what they disagree about, p. 1

women, will be further studied in "Eco-feminism".

4) Adult Environmental Education AEE.

"Environmental concerns" grew in the 1970's with the flourishing of different modalities of "Environmental Education" EE. In the decade of the sixties many "Environmental Education Programmes" had already started in different countries. These programmes were conceptually unified on a global scale in the 1970's and later "officialized" in 1972. Since then, EE programmes were adopted by the governments of many nations under the umbrella of the "International Programme of Environmental Education (IEEP)" of the United Nations Environment Programme.

One of its major goals was based on the managerial approach to Nature in order to "...catalyze and encourage international and national action for more effective management of the environment."¹. To accomplish this pragmatic and utilitarian goal, three tasks were established: the identification of problems (environmental assessment), the solution to the problem (management) and supporting measures (technical, financial, training and information).

¹ Johnson, The Role of the UNEP in Environmental Education, p. 77 In: Environmental Education. Principles, Methods and Applications, 1978

According to these goals and tasks, a new body of "Environmental Education" concepts also evolved, such as: "Environmental Education as a Dimension". The "dimension" included "formal, non-formal and informal arrangements" and followed the guidelines of "lifelong educational process."¹ The result of the IEEP was that thousands of teachers in primary, secondary schools, adult educators and administrators were involved in EE "...resulting in the environmental sensitizing of untold thousands worldwide"²

The UNESCO/UNEP -using sexist language- defined Environmental Education EE as "... a practical process for equipping man with the knowledge, skills and commitment to improve his environment."³. This male-oriented conception evolved from the critical intervention of youth organizations at the United Nations Conference on the Human Environment in Stockholm, Sweden, in 1972. They stated that..."The root causes of the environmental crisis were...":

...overpopulation", economic systems aimed at growth through induced overconsumption of natural resources; the unequal distribution of wealth between industrialized and less-developed nations, and between

¹ Johnson, Opus cit., p. 80

² UNESCO, The International Environmental Education Programme; promotional brochure. 7 place de Fontenoy, 75700 Paris, France, 1985.

³ Withrington, The UNESCO/UNEP Environmental programme and its Implications for British E-E. In: Hughes-Evans Edit. Environmental Education. Key Issues of the Future, p.33.

different sectors of the community within each country¹.

Here it is evident the influence of the managerial approach to "natural resources" and the mythology of "overpopulation" and "development" in the conference agenda: these issues were mainly sustained by representatives of "the less-developed" Third World countries attending the conference. Their arguments in favour of national "development" and against being considered "less-developed" were introduced in the discussions as a priority. Their challenging views against neo-colonialism aroused the disappointment of the "pure ecologist" and the "pure environmentalists" attending the conference because they did not want to be reminded of their own privileged positions as "First Worlders". Regardless of the ideological differences, the conference pleased the nationalist expectations of both parties when it reaffirmed "...the absolute right of sovereign countries to develop their own domestic resources without regard to the potential external ecological costs to the world community.." ²

This fundamental "environmentalist" statement was not only an "ideal" open door for some "atomic" countries to dump their radioactive wastes in the vicinity of the "non-atomic" countries. The same statement also pleased some international organizations -like the World Health

¹ Ibid, p. 33

² Ophuls, Ecology and The politic of Scarcity, p. 217

Organization and the Food and Agriculture Organization-, which have been sponsoring the "...Green Revolution and the eradication of malaria with DDT, that are a large part of their raison d'etre"¹. The World Health Organization and the Food and Agriculture Organization had the "green light" for going ahead and to continue expanding the use of deadly agrochemicals all over the world. The statement was also a justification for unethical governments of the Third World to sponsor "Exportomania"² and the finance of anti-ecological projects for "economic growth" (of the national elites). After the same conference, the UNESCO organized and financed a \$.4 million "Environmental Education Programme"(EEP). It started with a questionnaire to all member-states on needs and priorities followed by a compilation of bibliography. The appointment of 14 experts to write working papers, culminated with the publication of the document known as "New Trends in Environmental Education". One of those "trends" was on "Environmental Education Programmes for Adults"³.

The official approach to adult learning of these EE programmes is based on the Humanistic Philosophy of Adult

¹ Ophuls, Opus cit., p. 217

² Educational Network Project, Benefit or Burden? The World Bank, The Environment and Development, p.26

³ It defines "adult education" as "...education for persons above the school leaving age but not enroled in any institution of post-secondary/university education". Lars, Environmental education programmes for adults, p. 177

Education, as proposed by Malcom S. Knowles or "Andragogy" . It includes the notions of self-concept, self-direction and the autonomous nature of adults which must be translated into a cooperative learning environment, using the previous life experiences of the participants as a resource for others to learn. It also includes the notion of individual needs of learning, personal interests and what the individual believes is relevant or important, as the most important motivation for adults to learn. Finally, it emphasizes on the problem-solving approach to education and the needs of adults to apply theory in the practice¹ which is oriented towards the ultimate goal: the goal of "Environmental Education" is "development" for the "under-developed" countries to imitate the "over-developed" nations, considered as "models":

...only by simultaneous education on the means of achieving development can environmental education be credible in the developing countries².

This intellectual effort of "developmentalists" in Environmental Education, was followed by the "Belgrade Charter"³: a document produced and proposed as a global framework after the "International Environmental

¹ Lars, Opus cit., p. 179.

² Ibid, p. 185

³ UNESCO-UNEP Environmental Education newsletter "Connect". Vol. 1. N01. January, 1976., The Belgrade Charter. A Global Framework for Environmental Education. p. 69
In: Hughes-Evans Edit., Environmental Education. Appendix 1.

Education Workshop" which was held in Belgrade, from the 13 to the 22 of October, 1975. Later, in October 1977, the first "Intergovernmental Conference on Environmental Education" was organized by the EEP in Tsibilisi (USSR), which...

...provided through its recommendations, the framework, principles and guidelines for environmental education at all levels -local, national, regional and international- and for all age groups, inside as well as outside the formal education system¹.

Since then, 130 countries became involved trying to integrate EE within national educational policies, plans and programmes and for all age groups "inside as well as outside the formal education system"². Some important guidelines of Environmental Education are: to consider the environment in its totality; to be a life-long process of learning; to be inter-disciplinary; to include the environmental issues from a local, national, regional and international perspective; to include the historical perspective; to be cooperative and problem-solution-minded; to enable adults to have a role in planning their learning experiences, to make decisions and to accept their consequences³. The International EE Programme (IEEP) also includes two more guidelines: that the "problem solving" attitude of Environmental Education

¹ United Nations Educational Scientific and Cultural Organizations UNESCO, The International Environmental Education Programme, Promotional Brochure, 1985.

² United Nations Educational Scientific and Cultural Organization, The International Environmental Education Programme, (promotional brochure), 1985

³ UNESCO, The International Environmental Education Programme; promotional brochure. Paris, France, 1985.

must be based on methods of the "natural sciences"¹ and that EE frameworks must "...explicitly consider environmental aspects in plans for development and growth"².

This "explicit" consideration do not consider whatsoever to challenge unsustainable and anti-elitist economic "development" and growth"; nor the global hierarchy of nations, nor Transnational Corporations nor the national elites with international property as agents for the destruction of the Ecosphere. Hence, the ambiguity of the general frameworks of the IEEP serve as ideological vehicles for the perpetuation of the patriarchal neo-colonial and non-sustainable global economy based on "expansionism and growth"; the "environmentalist" framework allows the "development" of privileged elites at the expense of People that *have to* be "trained" for increasing and expanding global production and consumerism. The nature of "Adult Environmental Education" is reformist and its general "developmentalist" framework does not intend to challenge or to change the patriarchal hierarchical and anti-ecological basis of the capitalist or the socialist society but -on the contrary-, intends to contribute to its perpetuation. It contributes neither to the

¹ Kelly, What Do We Really Mean By Environmental Education?, Environmental Education. Key Issues of the Future, p. 61

² UNESCO, Opus cit., promotional brochure, 1985

development of an individual or collective ecological consciousness, culture, ethics and actions for social change.

a) Critical Analysis of Adult Environmental Education AEE.

In the following analysis I will include different approaches to "Adult Environmental Education" which will be exemplified with specific case-studies, according to the sociological "Typology of Adult Education Programmes" of Paulston and Altenbaugh¹.

The typology identifies the different tendencies of Adult Education programmes according to levels of goals for change from "low" to "high" and levels of control of the programme: from the extreme "individual" to the "formal systems" of control. The different types "...might be best viewed as central tendencies of a population that give the group its meaning or aggregate characteristics"². The typology will enable the process of identification of the nature of "Adult Environmental Education" programmes taking place in the types:

Type 1 "Conventional"

Type 2 "Consumer"

¹ Paulston and Altenbaugh, Adult Education in Radical US Social and Ethnic Movements: from Case Studies To Typology to Explanation, p. 114 to p. 137 In: "Radical Approaches to Adult Education: A Reader. Edited by Tom Lovett, 1988

² Paulston and Altenbaugh, Opus cit., p. 116

Type 3 "Radical Humanist"

Type 4 "Radical Structuralist"

Type 5 "Reformist"

The following analysis of AEE will demonstrate that there is a high correlation between the different types of Adult Education programmes and the "Philosophies of Adult Education" known as "liberal", "progressive", "behaviorist", "humanistic", "radical" and "radical-anarchist" ¹ .

The first two types of Adult Education reviewed "...are essentially regulatory and seek incremental individual change within the status quo."²; I will argue that the first two types of "Adult and Community Environmental Education and Training" known as *Conventional* and *Consumer*, tend to be conceptually based on the "Behaviourist" philosophy of Adult Education.

Type 1 or "*Conventional*" Adult Environmental Education. These programmes emphasize on in training service, teacher-training, skills-development and job-oriented activities. They are characterized by low change goals and do not challenge the status quo but -on the contrary-, they contribute "...to enhance individual

¹ Elias & Merriam, Philosophical Foundations of Adult Education, 1980

² Paulston & Altenbaugh, *Opus cit.*, p. 118

and socio-economic efficiency and productivity."¹ and to the perpetuation of the global consumer society. The programmes are hierarchically controlled by international organizations, national governments, the business sector, the scientific sector, academic authorities, authorities of the formal schooling system or the military forces.

The *Conventional* thought tends to be mechanistic, linear and unidirectional:

a) there is a tendency to conceptually base these programmes on "scientific" principles of "...stating objectives behaviorally, measuring outcomes in quantifiable terms, and developing mensurable competencies..."².

b) there is a tendency to specify the contents of learning as a sequence of "units" or "lessons" distributed within particular divisions of regulated portions of time and space. The "lessons" or "topics" are distributed in a hierarchical division of "levels";

c) there is a tendency to use behavioral, cybernetic and computerized language such as "mathematical models", "accountability", "outputs", "cognitive", "skills", "training" and "instructional technology"³.

¹ Paulston and Altenbaugh, Opus cit., p. 118

² Elías and Merriam, Opus Cit., p. 41

³ Cleary, Teacher Education, p. 228-231 In : Handbook of Environmental Education, 1974.

These principles, specifications and language - already mentioned- are an expression of the three ideological roots of "behaviourism":

Mechanistic materialism which considers that humans are "complex parts" of Nature; Positivist thought which considers that knowledge must be rationally understood "...through scientific observation and measurement of facts..."; and scientific realism and empiricism "...by which one arrived at truth through an examination of information gained through senses alone"¹. The *Conventional* programmes will emphasize on activities of "sensorial perception". The positivist thought will be expressed in the programmes as a tendency to include activities of data collection and finding the "objective" "facts", since positivism is...

... a view of human beings and social relationships as following laws similar to those governing the natural world. It assumes that knowledge of the social world is made up of objective "facts" that are open to measurement and control²

I will include in the *Conventional* type of adult education programmes all trends based on the assumptions of "resource management" and "conservation of natural resources". This utilitarian and pragmatic approach seeks greater social stability -and perpetuation- of the actual capitalist -or socialist- systems. I will include

¹ Elias & Merriam, *Opus cit.*, p. 80

² Weiler, Women Teaching For Change, p.25

in this *Conventional* type, the "environmentalist" approaches of "training teachers" for introducing Environmental Education in the formal schooling system.

An example of this type of AEE in the capitalist world, is the 1973 adult environmental education programme coordinated and sponsored by the "Environmental Conservation Education Division of the Soil Conservation of America". It included two types of programmes for the training of community leaders, decision makers, community colleges and the local governments: "... (1) adult education that is a systematically organized program of adult learning, and (2) adult education that is a random experiential type of learning¹. These programmes are utilitarian, considering Nature as an object, expressed as passive "natural resources" for "humans" to use and as "something there" waiting to be "managed"; it is a managerial approach of Nature manipulated by trained specialists guided by "conservationist" concerns².

A case study of the *Conventional* type in the socialist world, is the instant-knowledge approach of the "Environment Conservation Curriculum for Teachers Training Colleges In the U.S.S.R.". This programme, based on a concentrated "syllabus" of 32 contact-hours

¹ Soil Conservation of America, Planning and Organizing an Adult Environmental Education Program, p. 3. 1973.

² Opus cit. p. 12,13.

and applied on a massive scale, is expected to "train" thousands of teachers over 200 pedagogical institutes. The "syllabus" teach the teachers a disintegrated hierarchical mosaic of "natural resources" presented as a linear succession of recipes distributed on time: 1 hour of "air", 2 hours of "water", 4 hours of "soil", 6 hours of "plant" and 6 hours of "wildlife". This linear approach to "Environment Conservation" assumes that -once the teachers are instantly introduced in the "information" and "knowledge" of "nature"- , they would be equipped with what is necessary "to know" in order to involve -in turn- their young pupils "... in the process of nature conservancy and maintenance of the environment."¹.

The "environmental" approach of this programme in the U.S.S.R. is the result of Marxist "economic" and "scientific" thought which has been conveniently bureaucratized for its application to "conservation" and to "the study" of Nature as an object that is "there", waiting to be exploited: hence, the educational programme is...

...the study of complex utilization of natural resources leading to recommendations to local organizations in charge of exploitation and management².

The programme will result in "recommendations" such

¹ Gulashin, V. Case-Study 7-4. Environmental Conservation Curriculum for Teachers In the U.S.R., p.243 In: Handbook of Environmental Education With International Case Studies, 1974

² Ibid, p. 241.

as to establish a linear chain of unrelated days for "environmental" celebrations: one day for the birds and one day for the forests¹.

Another *Conventional* type -issue oriented- for "training teachers" in order to fit Environmental Education EE into the schooling system is proposed in the document: "Environmental Education. A Source Book For Teachers"². It is a convenient, simple and organized way for New Zealand teachers to incorporate "lessons" of EE in sequential schemes of "Levels", "Topics" and "Main Subjects"³ in their daily activities. The "Source Book" followed the recommendations of United Nations Environment Programme (UNEP) "...for more effective management of the environment,"⁴ which is the major goal of Environment Education. With that goal as a premise, the "Conceptual Model For Teachers" -as proposed by Graeme Scott in 1984-, is centered in the consideration of the "environment" as a "multidimension" of "...biological, physical, social, resources, economic and aesthetic environments"⁵, a definition similar to the approach of V.O.I. Johnson who -in 1978- defined the

¹ Ibid, p. 241

² Commission For the Environment, Environmental Education. A Source Book For Teachers, p. 2 . Graeme Scott, Editor. Wellington, March 1984.

³ Ibid, p.27.

⁴ Johnson, Opus cit., p. 77

⁵ Scott, Opus cit., p. 5

environment...

...not as an issue of discipline, separate and apart from others, but as a dimension which must be brought to bear on a whole range of activities which impinge upon the physical, biological, social and cultural aspects of the human environment¹.

The "multidimension" approach is also very similar to the "multidisciplinary approach" for achieving "possible alternative solutions" which ten years earlier, in 1974, proposed Environmental Education as:

...the process that fosters greater understanding of society's environmental problems and also the processes of environmental problem-solving and decision-making².

In the New Zealand case, the "multidisciplinary approach" is done through a "multi-levels", "multi-topics" and "multi-subjects" approach. These are methodically organized in a "Lessons Plan"³ which distributes EE "topics" in between a mosaic of twelve "main subjects" known as: Art, Maths, English, Outdoor Education, Drama, Biology, Chemistry, Applied Maths, Peace Studies, and Geography.

It seems that the best possibilities for a teacher to fit Environmental Education "topics" in the mosaic of school "main subjects" is through "Social Studies" (selected by the authors 12 times) and "Science" (selected 11 times). It also seems that the preferences

¹ Johnson, Opus cit., p. 77

² Saveland, Handbook of Environmental Education With International Case Studies. Case Study I.I., p. 12. U.S.A., 1974

³ Commission for the Environment, Opus cit., p.27

of these teachers to fit EE "topics" in relationship with other school subjects are not so high; because -for example-, in the case of "Outdoor Education" it was selected 6 times, while "Biology" was selected 4 times and "Peace Studies", once.

This *Conventional* programme of AEE for New Zealand teachers -published in the context of the 1980's-is in many aspects a step ahead of the two "Curriculum for Teachers" in the case studies seen before in the U.S.A and in the U.S.S.R., in the context of the 1970's. The EE for New Zealand teachers proposes "...an "opening them up" with sensory experiences..."¹. Although this phrase seems a re-arrangement of similar concepts of "sensory awareness" and "perceptual awareness" published by James A. Swan ten years earlier:

The development of one's perceptual senses requires more than exposure. It requires an openness, a willingness to experience, and the ability to use one's senses².

This emphasis on "senses" and "perceptions" is due to the ideological influence of Behavioral scientific realism and empiricism in this type of *Conventional* programmes.

¹ Scott, Opus cit., p.7

² Swan, Environmental Education. Strategies Toward a More Livable Future, p.30. U.S.A., 1974

The EE "Source Book for Teachers" continues the tradition of "values clarification"¹ which "...should be the most important component of environmental education."²; and since "values" -in their opinion-, are related with the satisfaction of needs, "...people cannot begin to reach for such values until their basic needs are satisfied."³. One of the "values" subtly integrated in this EE programme -which is intended for teachers living in a "free-market" society in a "First World" country-, is money. Hence, the EE "dimension" designated as "The economic environment" is conceived in monetary terms. Here, the utilitarian conception of Nature as a stock of "resources" is combined with the conception of monetary "economy" determined by "money"; then, the concept of "money" becomes dominant in a "dimension" which proposes an "integration" of: "...people, resources and the interaction through the medium of money..."⁴.

I also include in the *Conventional* type 1, the official programmes for "scientific cooperation" between "developed"

¹ Scott, Opus cit., p.9

² Swan, Opus cit., p. 38

³ Swan, Ibid, p. 38

⁴ Commission for the Environment, Opus cit., p.2

and "developing" countries as "...rational strategy for the long-term utilization of the biosphere by man."...¹. These programmes are based on theories of integration which blend "development" and "education" within the concept of "education as a capital investment" sponsored by organizations such as the Alliance for Progress and the International Bank for Reconstruction and Development:

The major value systems that have underlain economic and social development in the last couple of centuries have been associated with production. Thus, education, has been valued as a contributor to production².

There are two versions of the above "major value systems": one is a linear conception of "inputs" and "outcomes" (or "outputs") of education with no allowance for disagreement or conflict; the educational "contribution" to "production" people: un-critical, passive and "efficient"; people trained in order to be adapted to the "productive" system; it is expected that people -similar to "profits"-, will serve to the perpetuation of the unchangeable society. Hence, "production" is the main justification for "investment" in education³.

¹ di Castri, F. and Hadley, M. Ecological Training for developing Countries: Strategies and Actions of the Man and the Biosphere Programme, p. 73 In: Environmental Education: Principles, Methods, and Applications.

² Stenland, The Educational Core of Development, p. 68 In: Adult Education, Vol XXVI, n02, 1976.

³ Stenland, Opus cit, p. 75

The other version is the "integrated theory" which interdisciplinary approach to "development" is concerned with resistance to change; it is also concerned with the "lifelong" process of education, work and action which is "participation in development and preparation for development."¹; but...what "development" means and who will benefit from "development"? The "developed" nations are not models to be copied and the assumptions of "ideal standards of life" are mythical approaches to what, in the reality, are the anti-social and anti-ecological basis of the already "over developed" nations. The result of the "developmental model" has been the concentration of wealth, reduced to a minority and exclusive international "over rich" whereas poverty, misery, unemployment, disease and hunger which characterized the "under developed" world, is starting to be also evident in the "developed" nations.

Type 2 : *Consumer or Consumption Adult*

Environmental Education. These are programmes which include "private goals for self-realisation, creativity, growth, leisure and the like" such as Environmental Education EE programmes on "perceptual awareness" of rural and urban environments in order to overcome individual fears and other negative emotions since... "Some people, for example, are afraid of foreign

¹ Stenland, Ibid, p. 79.

environments, such as natural areas."¹ It does not explain that fear of Nature is an expression of the total divorce between people and themselves, between people and other people and between people and Nature as a result of living in a hierarchical and exploitative society. Other example of *Consumer Environmental Education* implies the "Relationship of Oneself to Society" as a perpetuation of the technocratic society with its anti-ecological technologies ruled by an elite. This programme sees technocracy as an "advancement" through the individualist approach of "personal decisions" that makes...

...imperative that future generations in our technological advancing society be more aware of the impact of their personal decisions upon society as a whole. The picture from the Earth from the moon clearly illustrate that we have only one spaceship Earth,....²

... although the Earth "spaceship" is already reserved for the privileged First World thecnologists as *their* convenient headquarters for *their* intergalactic explorations towards the colonization of *their* outer space.

Type 3 or *Radical Humanistic, Adult Environmental Education*. This programmes are controlled by the participants and "...struggles for human liberation". Their programme goals for change are high "...opposing the status quo and seeking radical change use adult education as anti-structure, as another weapon in their

¹ Swan, Some Human Objectives For Environmental Education, p. 30 In: Environmental Education, Strategies Toward a More Livable Future, 1974.

² Swan, *Opus cit*, p. 31

struggle for what they view as social justice."¹. The conceptual frameworks of Adult Education labelled "Radical" include the Marxist-socialist and the neo-Marxist traditions of Freudian Left and "Pedagogy for the Oppressed"² guidelines of Paulo Freire: "...the Marxist-socialist tradition in education attempts to produce the free and autonomous person through a revolutionary change from a capitalistic political economy to a socialist form of government and economy."³

As an example of the "Radical" type of Adult Environmental Education I have chosen the "Education Policy" for "Environmental Education and Community Action" of the Environment Centre in Canberra and the South East region in Australia⁴. The programme is based on "community activism" for a "greater understanding of their society...", being knowledge "relevant and personally meaningful".

Here EE is described as an "empowering" process which challenges "dissemination of information" approaches to education, such as "mass media", monologue of the teacher and education as a "transmisior-receiver"

¹ Paulston and Altenbaugh, Opus cit., p. 118

² Freire, Paulo, Pedagogy of the Oppressed, Seabury Press, N.Y., 1973

³ Elias & Merriam, Opus cit., p. 141-142

⁴ Watson, Environmental Education and Community Action. Canberra and South Region Environment Centre. Ian Kelly's Printing Press, Queanbeyan, NSW., 1985.

relationships : "Not only should education be explicitly about social change, but it also needs to be committed to liberation in the way it goes about its tasks". ¹.

Although the Marxist background of this programme is not mentioned, nor acknowledge in the bibliography, is still evident. Hence, the "Education Policy" is intended for the development of "...critical consciousness and how that consciousness can also be channelled in specifically environmental directions..."². hence, the programme is centered on activities of critical analysis.

It presents different methods of radical adult learning centered on the facilitation of small groups and group discussions, rather than on "teaching". The participatory methods of adult learning described, also mentioning their advantages and disadvantages, includes: (a) the "democratic and participatory" principles of critical reflection and action of "Education as a Dialogue" of Paulo Freire -whose conceptual roots are Marxist-, and his method of adult learning centered on the "circles of culture" and "dialogue" fully integrated in the programme.³; (b) the principles of group learning -with no formal teachers involved-, of the "Scandinavian Study Circles"⁴; (c) the non-formal, self-

¹ Watson, Opus cit., p. 4

² Watson, opus cit., p. 14

³ Ibid, p. 6

⁴ Ibid, p.7

learning principles based on the "concrete daily reality of the learners..." of the "Union Study Circles in Australia"¹; (d) the audio-visual approach to critical reflection and community activism of the group "Fotomontaje" in Peru; and (e) the principles of public participation and action in the "liberation theatre" for a representation of "revolution on the stage" which eliminates "...the spectator/actor division."². It also includes: "The Open Admission Programme at the City University of new York" which approach to adult education of Ira Shor in the 1970's was based on guidelines of Paulo Freire. Shor developed a method of learning for the encouragement of radical structuralist thinking which...

..., allows people to see that particular environmental problems or issues of social justice are not the fault of individual people but are rooted in larger, economic, political and social structures and that strategies to deal with these problems must focus on changing such structures³.

The five step-by-step process starts with the extensive description of the object studied which is progressively related with its social "structure", the global "structure", the time "structure" and the "space" structure" with a set of questions previously chosen by the "teacher" which intention is to "motivate" a critical answer from the "students".

In this Adult Environmental Education programme is

¹ Ibid, p. 8

² Ibid, p. 13

³ Ibid., p. 16

dominant the patriarchal dualistic thought which split "Nature" from "Culture":

The man made the well because he needed the water. An he did it because, relating to the world, he made the latter the object of his knowledge. By work, he submitted the world to a process of transformation¹.

The above phrase is an expression of oppositional thought which conceives Humans and Nature as separated entities. The separation also involves a hierarchical conception of domination-submission based on the assumption that Nature is a passive-object while "Man" is an active-subject, the one who "knows". "Man" is "superior" because "he" has the mastery, the reason, the intellect and the "consciousness" to control and to submit Nature. The utilitarian and pragmatic thought assumes that Man -through work- must "transform" Nature for "his" own purposes only if it contributes to the "...humanization of man, and is employed toward his liberation."². The concept "liberation" in this programme continues the lines of patriarchal hierarchical thought incorporated into the discussions in small groups which involve -for example- "...equitable control of power and resources" (Social Justice)"³. This is one of the phrases which continuously reveal the managerial approach of the programme which -as the *Conventional* programmes do-, considers Nature as a stock of

¹ Watson, Opus cit., Appendix 1. Paulo Freire Card: "First Situation: Man in the World, Nature and Culture"., p. 55

² Ibid, p. 58

³ Ibid, p. 84

"resources". The programme also reveals the persistence of hierarchical thought centered on the concept of "control" as necessary means for "liberation"; then, the conception of "liberation" through "control of power" (even if it is proposed as an "equalitarian" power), becomes anti-liberatory logic. And since the framework for a discussion is centered on "control", it follows a logic of a necessary rule, domination and command of "men" over other people and of "men" over Nature. The programme reveals the risks of adopting oppressive "controlling" thought, even if it hardly tries to make it compatible with "...the possibility of new relationships with other species which are founded on ideas of harmony."¹. To say that such relationship is a "possibility", reveals that the programme have not found a relationship to Nature different to one centered on intellectual critical analysis and one based on "knowledge of the facts" approach.

Type 4 or *Radical Structuralist or Transformational Adult Environmental Education*. This type is developed "in newly revolutionary societies (i.e. China, Cuba, Iran, Nicaragua, Vietnam)" by the "revolutionary" forces in order "...to achieve the ideological goals of the "revolution"². (I have not found case-studies for this type of programme.)

¹ Watson, Opus cit., 18

² Paulston and Altenbaugh, Opus cit., p. 118-119

Type 5 or *Reformist* Adult Education. According to Paulston and Altenbaugh, non-formal modalities of adult education happening within the "environmental movements", could be classified as a "type 5" or "Reformist" adult education, which...

...collective change efforts largely outside of formal systems control use adult education in incremental changes efforts seeking greater equity via civil rights movements, labour movements, peace and environmental movements¹.

Effectively, the "collective change efforts" and "equity" messages of "environmental movements" are now manipulated by "green entrepreneurs" as ideological instruments that contribute to the perpetuation of the hierarchical society of mass-consumers.

"Environmentalism" reformism has become very popular and all over the world, adults start to perceive social and ecological problems influenced by formal and informal types of "environmental education" and "environmental" sources of information. For example, training courses in reformist environmentalism have been adapted to formal programmes of secondary school and to programmes of adult and community education on a massive scale, sponsored by governments of the "First World" and international agencies for "development" of the "Third World"; the news has been reporting almost every day activities of protest of the so-called "greenies" and the

¹ Paulston & Altenbaugh, Radical Approaches to Adult Education: A Reader, p. 118

media have continuously published reports on environmental issues. Popular programmes for consumer's awareness frequently raise questions about "polluting" or "health risk" products or services, while the statement that "we are the world", has made invisible the hierarchical nature of the society.

Under the umbrella of the International Environmental Education Programmes IEEP it is possible to find -for example-, the intellectual discourse of some specialists in "Adult and Community Environmental Education", occupying important institutional positions; they could become agents for the perpetuation of the systematic poisoning of Nature and People, globally ruled by the World Bank¹, petro-chemical corporations, and environmental protection agencies in complicity with corrupt politicians, in order to perpetuate the food system of hunger².

Environmental Education could become a vehicle for the introduction of poisons in the community:

The dilemma in crop pesticides is that even though they may be dangerous to humans, they protect crops and therefore yield. The need for such pesticides is inherent in the need for higher productivity and return on

¹ Clark, For Richer for Poorer. An OXFAM report on western connections with world hunger, p. 29

² See: Bellini, Poisoned Earth, p. 169-191 in High Tech Holocaust; Bennet & George, The Creation of Hunger, p. 23 in The Hunger Machine; Van Strum, A Bitter Fog. Herbicides and Human Rights, p.81; Hynes, Silent Spring Revisited, p. 69-114;

investment¹.

Here, the market is more important than Nature and People's health and lives. Some governments continue to "educate" the community with decadent myths of the industrial-technocratic society, while sponsoring reformist programmes of "Environmental Education" all around the world. Some authorities determine that health and environmental programmes are important to "educate" the community; but they also decide that "adult educators" responsible of "environmental" programmes, must be passive; maybe a salary, could be the guarantee to keep some "adult educators" as bureaucratized, docile observers:

There is not much adult educators could do to avert indiscriminate dumping of industrial wastes. That is the work of the administrative policy²

I will argue that -on the contrary-, "adult educators" have a very important work to do: to raise ecological awareness in the community about the "whom, what, how and when of the "indiscriminate dumping", since the people have the right to know all the polluting factors in their communities; the "adult educator" could organize learning activities in the neighbourhoods in order to find data on what are the negative effects of those "industrial wastes" in the local natural environment and in human health; the adult community could start to organize a center of information on waste

¹ Mburu, Environmental Health Risks and Suggestions for Action Through Adult Education, in Environmental Education Through Adult Education Programmes, p.4

² Mburu, Opus Cit. p.4

issues in the local library, to find out the related legislation, to research the facts on the polluting effect of the industries localized in their region and to compare them with the industries on a national and international level; "adult educators" could also facilitate learning processes for the development of critical consciousness for adults to challenge those who are responsible for dumping industrial waste; also "adult educators" could facilitate process of collective organization, developing community actions to challenge the industry responsible for the "indiscriminate dumping" and to change the "administrative policy". The community is empowered to change the legislation and the local and regional government that permitted this abuse to happen.

In summary, it is possible that under ambiguous framework that serves as a conceptual umbrella of the International Environmental Education Programme, some types of formal and non-formal "Environmental Education" for adults are making "invisible" the hierarchical and oppressive nature of socio-ecological chaos. The majority of adults in the world, are not aware and conscious of the social and hierarchical reasons behind major trends of ecological destruction that endangers their own existence; and, without ecological awareness and consciousness of the social and hierarchical roots of exploitation and oppression of People and Nature, the communities do not act to challenge and to change those reasons. The lack of information and socio-ecological

awareness, is reflected in the general passiveness of the community and the individual. Only few isolated groups in the community are challenging mining, pesticides, water pollution, nuclear activity or forest destruction. In relationship with their own environments the majority of people keep passive and content as long as the problems -not always evident-, do not affect directly their own backyards; "environment" is not a matter of concern for the average citizen to take public actions. The lack of awareness an open door for the patriarchal control of the community through "consumerism" manipulated by the media and paid by the economic elite, in a society moved by the "Profit Motive"¹. Their ideal conception of "freedom" is to "free the market forces" and give the consumers "freedom to shop" -on the weekends-, and if they can afford it².

"Free market freedom" in capitalist and socialist countries in the 1990's, is the reality where the communities are facing confusion and paradox since social chaos and destruction of the eco-systems will continue to happen. In the mean while the increasing use of "green", "natural" and "clean" images are being manipulated by the media: for the politicians, to convince their electorates to vote for them; and for the corporate managers, to attract more "greeny clients". In this decade, towards

¹ Flew, The Profit Motive , 1980

² Hogbin, Free To Shop 1983

the year 2.000, the reality is that -for their survival- , the communities will have to overcome major problems such as the generalized ignorance of the socio-ecological basis of humanity, the submission to hierarchical systems of domination of People and Nature and the intensification of destruction of the Eco-sphere. If they want to live free of hierarchical oppression, with the right to stand on a living soil, breathe pure air, drink clear water and feed on pesticides-free food, the communities will learn how to develop a sustainable economy, new eco-cultures and eco-technologies adapted to their local needs. For the purposes of articulation of a theory of change for REAL towards 2.000, a re-conceptualization of the radical, anarchist and utopian traditions of adult learning, must be found and integrated with a theory of change.

II. ECOLOGICAL THEORY

1) The ambiguity of the "Ecological Theory"

Some eco-feminists are identified with particular "ecological" theories conceived by male, white intellectuals. This identification will uncover the internal tensions and conflicts between multiple "ecological" frameworks: "Social Ecology" theory of Murray Bookchin; "Deep Ecology" or "bio-centric equality" theory of Arne Naess; the "Ecological Paradigm" or "the Tao New Physics" theory of Fritjof Capra; "Gaia Thesis"

or the "Planetary" theory of Jim Lovelock; and "Ecological Science". As Murray Bookchin says:

I submit that we must go beyond the superficial layer of ideas created by 'biocentricity', 'antihumanism', Malthusianism, and 'deep ecology' at one extreme, and the belief in growth, competition, human 'supremacy,' and social power at the other extreme. We must look at the social factors that have created both of these extremes in their many different forms and answer key questions about the human condition if we are going to harmonize humanity's relationship with nature¹.

Many other ecological theories are sustained by First World, white, academic males who have generated a profuse body of specialized literature. On the one hand, "Ecological Science" means objective research, studies, experiments and measurements of the interdependence of organisms, populations, communities, eco-systems and the ecosphere, all linked by cyclical webs of food and energy, living in the context of a non-living environment. On the other hand, since "Ecological Science" is being used to sustain and justify economic policies of exploitation of Nature through "Environmental Economics" and "Resource Management", different critiques of a philosophical, ethical and political nature have evolved. Other position which offers ethical, theological and philosophical arguments, is "Deep-Ecology", which criticizes the superficial views of "Scientific Ecology", proposing a different approach:

... the term *ecosophy* -eco-wisdom-was introduced in order to contrast normative, philosophical views from facts and theories within the science of ecology. It was also introduced to stress the necessity of clarifying the relation between abstract principles and concrete

decisions. Wisdom, not science implies such a relation¹.

The above discussions between "ecological scientists", and "eco-sophers" are extensively debated at the level of intellectual exercises between male, white, high middle class university lecturers, publishing numerous books and articles defying each other.

2) The REAL quest within Eco-feminist Theory

The purpose of this analysis is to examine some Eco-feminists theoretical trends and their different perspectives of patriarchy and -eventually-, to select a theoretical framework appropriate to Real Ecology Adult Learning, since:

Women must see that there can be no liberation for them and no solution to the ecological crisis within a society whose fundamental model of relationship continues to be one of domination. They must unite the demands of the women's movement with those of the ecological movement to envision a radical reshaping of the basic socio-economic relations and the underlying values of this society².

...although which "demand's ? They are varied and contradictory as the demands of "the ecological movement". Though the selection of an "Eco-feminist" theory involves the confusion that arises when one is faced with the multiple tendencies of the "Eco-Feminist"

¹ Naess, 1987, p. 265

² Rosemary Radford Ruether: "New Woman/New Earth", 1975.

frameworks.

a) The generic concept of "Eco-Feminism"

The paradoxical nature of the concept "Eco-Feminism" brings together two ambiguous generalizing concepts: "Ecology" and "Feminism". According to Allison Jaggar, the common aim of "feminism" is to liberate women. She also assumes that feminism embrace four theories of patriarchy known as "liberal", "Marxist", "socialist" and "radical"¹. However, for many feminists "liberation" has different interpretations when is approached from a "First World" or a "Third World" perspective:

...within the given framework of the international division of labour and of the wage-workers' interests closely bound with those of capital, there is little scope for true solidarity between Third World and First World women, at least not the type of solidarity which can go beyond paternalistic rethoric and charity².

On the one hand, it is important to reveal the risks of some feminist positions adopting "paternalistic rethoric" characterized by dualistic-oppositional thought to analyse the reality already polarized. On the other hand, the eco-feminist principle of non-hierarchical "unity in diversity" challenges the dualistic-hierarchical though.

The following analysis of the eco-feminist theory

¹ Jaggar, A., Feminist Politics and Human Nature, 1983

² Mies, Patriarchy and Accumulation on a World Scale, p. 232

will include arguments explaining the patriarchal logic of domination of Women and Nature as a dualistic and oppositional system of thought; its conceptual framework of assumptions, beliefs and values serves to the perpetuation of privileged elites and hierarchies based on economic power, family relations, sexism, ageism, ethnic differences of language and culture and racism¹. Hence, the eco-feminist theories will be discussed, discriminated and carefully explained, before attempting a particular selection for a theory of Real Ecology Adult Learning. The analysis will focus on: firstly, on concepts definition and a brief the historical background of Eco-feminism. Secondly, on the major arguments developed within the different frameworks of "Eco-feminism". Trying to avoid biases towards the exclusive selection of a specific "ecological" or a "feminist theory", the quest focuses on an integrative and holistic "learning" position; one that -without becoming a "hybrid" of controversial frameworks-, will be centered on critical adult and community learning. It is crucial for REAL that "ecological theory" -which happens to be a sophisticated intellectual battlefield between rivals at high academic levels-, becomes understandable to

¹ See: the "patriarchal conceptual framework" of Karen Warren in: Feminism and Ecology: Making Connections, p. 6; the arguments on "colonizing divisions" of Maria Mies in: Patriarchy and Accumulation on a World Scale, p. 210-211 and the "affiliation Women-Nature" of Caroline Merchant in The Death of Nature: Women, Ecology and the Scientific Revolution, 1980.

illiterate adults and accessible to the rural and urban communities.

b) The generic concept "Ecology"

If the writer is a man, the origin of the concept "Ecology" becomes masculine as seen in two examples of "male" ecology:

The word "ecology" was first used by a German biologist, Ernest Haeckel, in 1870, but it wasn't until 1930 that ecology assumed full professional status-the last of the sciences to do so¹.

Ecology was originally defined by Ernest Haeckel, a German biologist, in 1869, as the total relations of the animal to both its organic and its inorganic environment².

On the contrary, according to Carolyn Merchant, the first pioneer of scientific Ecology was a woman: Ellen Swallow, also the first woman to work -from 1871-, at the Massachusetts Institute of Technology. As an instructor of sanitary chemistry and nutrition, she encouraged women students to experiment and research in a laboratory specially implemented by her:

In 1882 she developed a science of environmental quality which she called "ecology." She envisioned it as a science concerned with industrial health, water and air quality, transportation and nutrition. Soon it became known as "home ecology" and then "home economics"³.

The root of "Eco" (-logy), originates in the greek

¹ Porritt, Seeing Green. The Politics of Ecology Explained, 1986 p. 3

² Golley, Deep Ecology From the Perspective of Ecological Science, in "Environmental Ethics" Vol.9 Spring 1987, p. 49

³ Merchant, Women and the Environmental Movement 1981. p.7

word "oikos" meaning "house" and -similar to a house-, is a particular thin layer that covers the globe or "Ecosphere" which harbours the totality of life on planet earth. It is located between two layers of non-living environments: at the top layer situated 40 kilometers above our heads, life is impossible because it is too cold and penetrated by ultraviolet rays and other lethal radiations; at the bottom layer, 300 kilometres under our feet, life is also impossible because it is too hot. Using the sun as a source of energy, all the conditions - for life to start and to continue living-happens to be self-regulated and self-contained within the limits of a thin layer, the Ecosphere. Currently, the Ecosphere has become the object of scientific investigation, the intellectual torment of philosophers, the inspiration of poets and theological thinkers, a commodity for the economists and a "green" image for the politicians.

c) The generic concept "Feminism"

It tends to be identified with a sexist female position "against men" and with some "feminists" arguments which lead to dualistic-oppositional patriarchal thought. One example of dualistic thinking is the analysis of the "First World-Third World" global economic system as part of a polarized world of opposites which -according to maria Mies-, are "colonizing divisions": Human><Nature, Man><Woman, Rational><Irrational, Head><Body, Mind><Matter,

Progress><Retrogression, Labour><Leisure, Culture><Nature>¹. Dualistic thought reinforce the tensions and ideological contradictions between "First" and "Third" world feminists. This feminist paradox is evident in the following four dualistic arguments: "Equal pay", Capitalist><Socialist "ecologically blind" and "colour" arguments.

In the "First" world, women debate on the unjust inequality of paid work since the women are paid lower wages than men for the same type and quality of work. The demands on "equal pay" has become one of the main socialist feminism struggles². In the "Third" world instead, highly exploited pre-capitalist forms of production means that there is no salary system like in the "First" world. On the one hand in agricultural labour the family -as a productive agricultural unit-, receives one overall payment or part of the crop in exchange for the work of all its members. On the other hand -in paid industrial or technological labour-, the issue of male>< female salaries does not arise because the male salaries are so low that "equal pay" is not enough for women liberation³.

¹ Mies, M., Patriarchy and Accumulation on a World Scale, 1987 p. 210

² Jaggar, Feminist Politics and Human Nature , p. 324

³ Latin American and Caribbeans Women's Collective, Slaves of Slaves. The Challenge of Latin American Women, 1983. p. 11

The dualistic thought are also expressed in the Patriarchal Capitalist >< Socialist arguments. In the "First" capitalist world, "...procreation, as part of the economic foundations of society has carried forward the radical feminist challenge to the traditional distinction between public and private life..."¹. The feminist critique of the "gender blind" Marxist analysis of "class", is challenged by socialist feminists who make "an explicit commitment to the abolition of both: class and gender."². But it is "Socialism" the answer to such "abolition"? According to Maria Mies -who also critiques the Marxist "gender-blind" analysis of class-, women under Socialist regimes have not achieved the aim of "abolition of class and gender" and presents evidences of patriarchal dominance, injustice and abuse of men over women, under socialist systems in the Soviet Union³, China⁴ and Vietnam⁵. Women, who participated in contemporary wars for national independence, are massively organized by leaders of revolutionary parties and dominated by "revolutionary" males comrades: "After the war, people go back to what they consider the

¹ Jaggar, Opus cit. p. 143

² Ibid, p. 327

³ Mies, Opus cit., p. 180-81

⁴ Ibid, p. 181-188

⁵ Ibid, p. 188-194.

"normal" state of affairs in man-woman relations"¹ and women tend to withdraw their political positions for adopting domestic and child care responsibilities. Socialists efforts to eradicate capitalist ideologies and habits, fail on the grounds of elimination of gender dominance of the patriarchal "culture".

Dualism is also seen in "ecologically blind" arguments. For example, as a "First World" thinker, Allison Jaggar dedicates in her work of 408 pages of tight writing only one long phrase about a "shared concern for ecology". She mentions three times the concept "non-human nature"², inserts a confusing critique to a certain "environmentalist" mixed-up with biologism. In her book "environmentalist theories" are mentioned twice, although without any description. The exploitation of "Third" World women and destruction of the "Third" world environment, has permitted the wealth of the rich countries while millions of babies and young children die of malnutrition every year, caused by the imposition of an unjust system of chemical food production. Living at the edge of global extinction, it is not possible to conceive feminism any longer without considering ecological principles and ethics, which challenges the patriarchal capitalist or socialist tendency to economic expansion and unlimited growth.

¹ Ibid, p. 196

² Jaggar, Opus cit., p. 306-307

Another expression of dualistic thought which express the differences between First World and Third World feminists, are the assumptions on the "colour of the skin". When "feminism" is seen from the view point of white, university educated females living in the "First World", some will define the other "not black" women - from the "Third World"- as "women of colour". The concept "women of colour" is used by Pat Mahony¹, by Sylvia Walby² and also, by Alison M. Jaggar³. I will argue that these feminist generic terms concerned with the colour of the skin of women, have racist connotations.

The ambiguity of the generic concept "Feminism" lead to a range of four different theories of patriarchy: Liberal, Marxist, Socialist and Radical feminism⁴. These theories have been critically analyzed by the eco-feminist Karen Warren. Firstly, the liberal feminist theory assumes that "...all individuals have an equal potentiality for reason."⁵. Rational thinking is analytic and linear and it has been adopted by conventional

¹ In page 52 of: "School for the Boys?";

² in page 48 of: "Patriarchy at Work".

³ Is use eleven times in: "Feminist Politics and Human Nature".

⁴ See Jaggar, Opus cit.

⁵ Jaggar, Opus cit, p. 33

science to fragment, quantify and measure reality. Rational thinking views society as a fragmented aggregation of individuals, each individual being autonomous and moved by self-realization. According to Karen Warren, this individualism is reflected in "liberal environmentalism of "equal rights" and "equal opportunities" for "human" females; these rights have been also extended to "non-human" individuals:

...protection of endangered species, restrictions on the use of animals in laboratory research, or support for the appropriate technology, anti-nuclear, and peace movements on the grounds that they are mandated by considerations of the rights, interests, or well being of present or future generations of humans (including women, mothers, and children)¹.

For example, one of the most important individual rights of liberal "environmentalism" is the trend of "conservation of natural resources" "...to allow the needs of the present generation to be met without compromising the ability of future generations to meet their own needs². Secondly, the eco-feminist critique of the feminist Marxist theory, focus on the fact that Marxism "...does not pit men and women, as one class over and against nature."³ and its failure to demonstrate their claim that environmental destruction is exclusively a capitalist problem. Warren also critiques the ecological omission of socialist feminism which "...does

¹ Warren, Feminism and Ecology, Making Connections, p. 9

² Resource Management Bill NO 224-1, p. i. Wellington, 1989.

³ Warren, Opus cit., p. 13

not explicitly address the systematic oppression of nature..."¹. Finally, Warren critically analyse the views of the radical feminist for its lack of analysis "of women's oppression", within a socio-historical and material context and because it does not uncover the "interconnections between the oppression of nature and women on the one hand, and other forms of oppression (e.e., racism, classism)".² In summary, the four versions of feminism: liberal, marxist, socialist and radical, do not offer a theoretical framework for a theory of change for Real Ecology Adult Learning since they "...have not, in fact, articulated a position on ecology or on the nature of the connection between the oppression of women and oppression of nature"³.

3) Background of Eco-Feminism

The concept "Eco-feminism" is relatively new, and started to be used from the 1980s during the first conscious struggles and politically organized attempts to integrate the feminist and the environmental movements. Much earlier, many women had already participated in the environmental struggles of the 1960's and the 1970s and some had contributed to develop a rich and diverse body of theory.

¹ Warren, Ibid, p. 17

² Warren, Ibid, p. 17

³ Warren, Opus cit., p. 5

a) The pioneer of Eco-feminism

Twenty seven years ago the world was shaken on the danger of pesticides by Rachel Carson; in the first two pages of her book "Silent Spring" everything was said. Slow death of plants, animals, people and her statement: "No witchcraft, no enemy action had silenced the rebirth of new life in this stricken world. The people had done it themselves"¹. She analyzed the causes and deadly consequences of "synthetic insecticides" and criticized the patriarchal roots of the problem:

The 'control of nature' is a phrase conceived in arrogance, born in the Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man².

Today the problem of "insecticides" still continues but the use of herbicides has grown in alarming proportions, and thirteen years after "Silent Spring" another woman, Carol Van Strum, recovers the feminist tradition of Rachel Carson. This time her struggle is in the defense of her own children and their home that had been sprayed with herbicides by helicopters of the "U.S.A. Forest Service". Fighting back in her book "A Bitter Fog. Herbicides and Human Rights", she reveals the political and economic roots of patriarchy that continue poisoning People and Nature.

The tendency to integrate the Feminist struggles

¹ Carson, R., Silent Spring, p.3

² Opus cit., p. 243.

with Ecology was further promoted in the U.S.A. through a series of conferences, courses and gathering between 1979 and 1981. These activities permitted women to analyse the links between Women and Ecology¹. The growth of Eco-feminism has been parallel to a reaction of patriarchy to consider Nature as a female.

b) Neo-Patriarchal tradition of identification Woman-Nature

A recent example of patriarchal manipulation is the symbolism of the "Gaia Hypothesis" which implies a sexual pleasure of men toward Nature:

... there seems no need inevitably to attribute the pleasure we feel on a country walk, as our gaze wanders over the downs, to our instinctive comparison of the smooth rounded hills with the contour of a woman's breast. The thought may indeed occur to us, but we could explain our pleasure in Gaian terms².

The above use of "we" by Lovelock, certainly does not include sexual feelings of heterosexual women who would feel pleasure "...as our gaze wanders over" the phallic branches of trees, or "to our instinctive comparison" of hard erected rocks or mountains "with the contour" of a male organ.

The Gaia Hypothesis is based on the scientific research on life in planet Earth, derived as a result of the NASA space programmes trying to find life in Mars and

¹ Merchant, Women and the Environmental Movement, 1981.

² Lovelock, GAIA, A New Look at Life on Earth, p. 142

the scientific research on the global consequences of air pollution by fossil-fuels. The research of J.E. Lovelock on air pollution was financed by the "Shell Research Limited": with the profit made while dumping in the Third World, poisons that have been banned in the First World. The Gaia Hypothesis, conceives planet Earth as an organism able to regulate itself, assuring the conditions that makes possible the continuation of Life. The Gaia conception, according to the sexist scientificism of J.E. Lovelock, also blends with a new mysticism with religious tones around the symbolic Earth-"Gaia" as a feminine "organism". The anthropo-centric and sexist conception of the planet is such, that excites the sensual imagination of the "male scientist" -J.E. Lovelock-, while "he" is exploring "she", the "female virgin land" in order to discover "her" secrets.

The Gaia hypothesis has attracted the attention - and the approval- of many male scientists all over the world. This was demonstrated two years later -in March 1989-, at an international Conference at Auckland University on the Gaia Hypothesis: "The Living Earth", which captivated hundreds of people. Most of the speakers, were internationally famous scientists and all the programme was male dominated with a "chair-man" using and abusing of sexist language. Some women at the conference asked the speakers to stop using sexist language and male biases but the "chair-man" did not let the women speak long enough to express their views.

Abundant "Gaia" literature was for sale at the foyer of the Auckland University and -covering the walls-, a new imagery of "Gaia". "She"-planet Earth-, was symbolized as a young and beautiful woman lying on her back with parts of her body looking like hills and valleys, covered with flowers and bushes; the "Gaia" merchandise was in exhibition -in all sizes-from enormous paintings to small "pretty" post cards. The paintings suggested that these virginal, placid women were offering themselves, opened to scientific exploration of the numerous male ecologists, followers of the "Gaia Hypothesis". These ecological scientists have found a perfect patriarchal framework of male domination over the "Woman-Nature" entity:

Western culture derives mainly from patriarchal Greek and Roman mythology. In that mythology, Gaia begins as a parthenogenic initiator, but quickly becomes subservient to her son-husband, Uranus. As soon as the male arrives, the female loses her independence. Hesiod states that Earth arose first and created Heaven-Uranus "equal to herself". Yet he is immediately deemed "father Heaven" and gains control of his mother¹.

While recent symbolic representation "Woman-Nature", in the context of patriarchy, is one problem that must be studied, according to Merchant, a different view is offered by Merlin Stone, Dolores La Chapelle and Adrienne Rich. In their arguments on prehistoric cultures that worshipped goddesses or were reverent of "Mother Earth", they sustain that it could serve as a way of symbolizing actual eco-feminism and as a source of

¹ Murphy, Sex Typing the Planet: GAIA imagery and the Problem of Subverting Patriarchy, p. 156



Nature

inspiration:

...a revolution in symbol structures could help to transform the patriarchal-technological culture that brought about the separation of people from nature and the lower status of women¹.

However, the "revolution in symbol structures" that gives inspiration to the artistic "Gaia" creations -for sale in the foyer of the Auckland University-, is similar to the inspiration that distributed pamphlets announcing a new religion which adores the new "goddess Gaia" and is inviting people to be the "her" worshippers:

We, of the Church of "Gaia" believe that our planet will go through a period of purification, and that all is NOT lost. If humankind can search for the TRUTH we will enter a new age of awareness after this period of purification of PLANET EARTH (GAIA)".²

However, the new sexist "'Gaia'" religion(s) does not reveal who will be "the pope" and the archbishops. After the conference, important articles were published, inspired by the Gaia Hypothesis and the "Living Earth" conference.

c) The Risks of Adopting Some Trends of Eco-Feminism

The raising popularity of the identification Woman-Nature makes necessary a cautious approach to "eco-Feminism". Currently, there are various contradictory Eco-Feminist trends. A critical analysis of possible risks of Eco-Feminist positions is offered by Carol

¹ Merchant, Opus cit. p. 8

² Philip, C. Gaia Fellowship. Part of the Church of GAIA Trust Family, 1988. Pamphlet. Alpha and Omega Centre. Tairua, New Zealand.

Merchant, including various perspectives of feminist theory on the "women-nature" theme¹. On² She analyses the interactions developed by Ecology and Feminism in their conceptions of human nature and society, and their "common policy goals", in order to propose four linkages:

a) The Eco-feminist value that "All parts of a system have equal value". The equalitarian value of all organisms living in their particular environment, is compared with the liberal feminist position of achieving equality between men and women. b) The conception of "The Earth as a Home" focusing on the revival of a healthy environment indoors and outdoors c) The value of "Process is Primary" which is explained in term of the "Law of Entropy" and which proposes that energy flow in nature serve as a model for a dynamic exchange of human knowledge and experiences; the flowing of information and discussion, all of which are basic for human decision-making. In that way, individual knowledge and experiences are passed onto the whole "human-nature community"³.

Merchant also adopts the popular phrase of Barry Commoner "There is no Free Lunch" to express her concerns about the dispersion of energy or the avarice of "profit-hungry humans." She uses the "Law of Entropy" again to the situation of women in the household : "Continually

¹ Merchant, OPus cit., p. 9

² Merchant, Opus cit., p. 10

³ Merchant, OPus cit., p. 10-11

trying to create order out of disorder is energy consumptive and spiritually costly." Merchant looks at some conflicts and contradictions between environmentalists and feminists and also she highlights the political movement of women in the anti-nuclear or the anti-pesticides and herbicides campaigns, women opposing chemical wastes and those in favour of appropriate technology. She recommends a coalition of people, male and female, and the unification of women's and ecology movements to cooperate in the struggle for achieving similar goals. Not being Marxist-minded, Merchant omits any gender-class analysis in the context of the economic basis of the capitalist society -where she lives-, but acknowledges that:

"many feminists also recognized that without a simultaneous revolution in the social, sexual, and economic structures that exploit both women and Nature, the symbolic revolution cannot succeed."¹

...and she call instead, for a revolution at the level of "super-structures", without mentioning the economic and political root of Patriarchy:

Environmental, technological, social and linguistic revolutions must all take place simultaneously. In this way perhaps the future of life on earth may be sustained².

b) Maria Mies

Maria Mies has not discovered yet the recent fusion of Eco-Feminism and continues her separated critical analysis: on the one hand of "ecology" and the

¹ Merchant, Opus cit., p.8

² Merchant, Ibid, p. 40

environmental struggle and on the other hand of "feminism", as if they continued being separated movements. Her concern is to uncover the causes of the problems of exploitation and oppression in a socio-historical context. She explains the mechanisms of power and control that keep the Patriarchal hierarchy of nations of "First" "Second" and "Third" world countries intact, through historical analysis of the relations of exploitation of women. She raises a critique of the Sexual International Division of Labour. Her feminist theory on neo-colonialism of Nature and Women, could be used as a powerful tool for eco-feminist analysis aiming to include the exploitative relations and the socio-economic basis that sustains the patriarchal system on a global scale.

c) Karen Warren

Her position on Eco-Feminism is based on the search for the interconnections between the oppression of women and nature, focusing on the needs to understand the nature of those connections since "...feminist theory and practice must include an ecological perspective" and "solutions to ecological problems must include a feminist perspective". She offers an innovative theoretical framework entitled "Transformative Feminism" which recognizes and makes evident *all* forms of oppression", not only sexism, racism, classism but the oppression of nature ageism and third world countries.

Eco-feminism aims to put an end to the system of

patriarchy. Karen Warren provides a "central theoretical place for the diversity of women's experience" based on the ecological law of Unity in Diversity, "one which ties the liberation of women to the elimination of all systems of oppression"¹ which rejects any logic of domination. She conceives the human and non-human interconnections at new psychological and philosophical levels guided by a new ethics of "non hierarchical models of morality and conflict resolution"² which challenges patriarchal science and technology. Her "Transformative Feminism" uncovers the male conceptual framework of beliefs, values, attitudes and habits, presenting evidences of the existent connections between the oppression of women and the oppression of nature and challenging the patriarchal assumptions that perpetuate an overall system domination.

For that purpose, her choices of ecological principles, are similar to the ones chosen by Merchant: "everything is interconnected with everything else", "all parts of an eco-system have equal value" and she also selects the most popular phrases of Barry Commoner, such as: "there is no free lunch" and "nature knows best". She also adopts the principle of balance of the system and diversity, and the principle of unity in diversity.

d) Patriarchal Conceptual Framework

¹ Warren Oups cit., p. 18

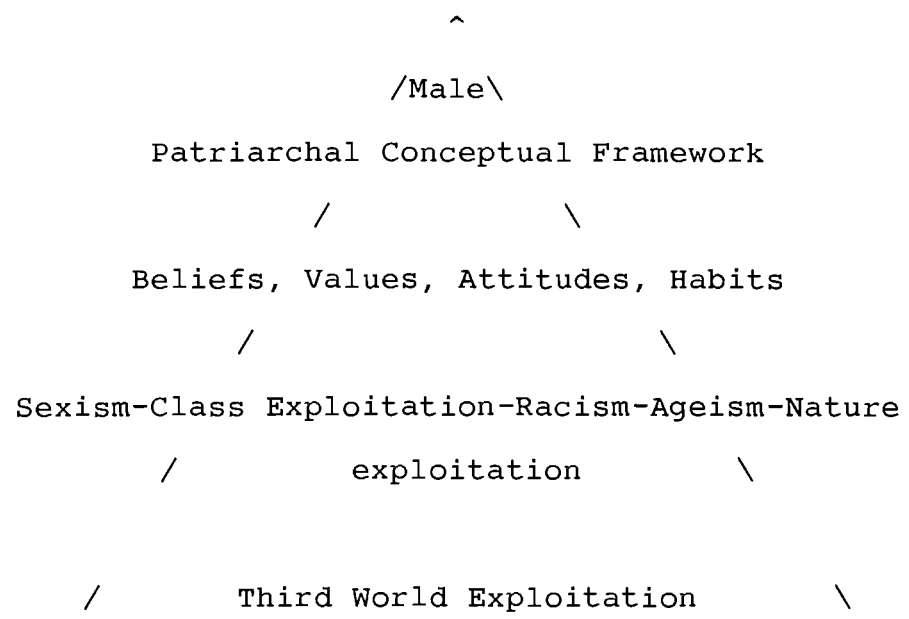
² Ibid, p.19

For the following analysis of patriarchy, I have adopted the "eco-feminist project" of Karen J. Warren of "...unpacking the connections between the twin oppression of women and nature. Central to this project is a critique of the sort of thinking which sanctions such oppression."¹ I have also adopted her definition of patriarchal thought: "...A patriarchal conceptual framework is characterized by *value-hierarchical thinking*." which "gives rise to a *logic of domination*."² which could be symbolized as a pyramid of power:

¹ Warren, K., Feminism and Ecology: Making Connections, p. 6 In: Environmental Ethics, Vol 9. Spring 1987

² Karen, W. Opus cit., p. 6

Figure 5



e) The "Ecological" Hierarchical Pyramids

One example of the patriarchal conceptual framework is a particular "scientific ecological" analysis of Life, which is studied and mathematically calculated by some professional "ecologists" within a hierarchical classification, vertical organization and categorization in levels "from bottom upwards" of individual organisms, populations, communities, ecosystems and the Eco-sphere. Some "scientific ecologists" represent these levels interconnected by arrows or lines representing computerized "inputs" and "outputs" of nutrients and energy "chains" or "flows"; such linear organization is defined by some ecologists as the "Realm of Ecology"¹.

I will argue that the concept "Realm" also means "domain", "dominion", "empire" and "kingdom", all terms related with patriarchal hierarchical thought. The patriarchal conceptual framework of the "Realm of Ecology" is usually represented using vertical and layered "levels of organization of matter" contained in rectangles, which -from top to bottom-, also suggest hierarchy: "Ecosphere" is at the top and "Organisms" are at the bottom. Verticality is also common in visual representations of "food chains" or "trophic" levels with an even more hierarchical representation of them as "Higher" and "Lower" levels within a pyramid. Plants and

¹ See "Realm of Ecology". Cronin, K., Figure 3 : Levels of Organization of Matter. (After Miller 1975, p.48) In: Ecological Principles for Resource Management, p.20

some bacteria as "Primary Producers" are constricted to the bottom line; herbivores and plant parasites, or "Primary Macro-consumers" are layered on top of "Producers"; above them, "Secondary and Higher order Macro-consumers Carnivores" and -finally-, on top of everything else, "Omnivores": that is, animal parasites, scavengers, rats, pigs and humans. Some pyramidal representations do not include "Decomposers or Microconsumers" (the saprophytic bacteria and fungi specialized on decomposing dead organic matter), while others also include a Herculean male "Homo Sapiens" at the higher level above the tip of the pyramid.

Carolyn Merchant explains the connections of "Ecology" of the beginning of this century and the "...hierarchical variant of the organic model..."¹, emphasizing on the tensions between the organic unity with the "...mechanical philosophy and its managerial point of view."². The symbolic representation of "Organic Unity" as an expression of hierarchical thought in the Renaissance, is a series of concentric circles or rings around planet earth -comprising from outwards towards inwards-, God, Heavens, Society and Nature which order...

...was also stratified according to status, with peasants at the bottom, the king and pope at the apex, and women below the men of their particular status group.

¹ Merchant, C. The Death Of Nature, p. 76

² Carolyn, M., Opus cit. p. 103.

Nature as the involuntary agent of God, as the immanent manifestation of God's law in the world¹.

The "scientific" ecological theory of hierarchical pyramids continues the tradition of the "stratified" universe, seen as an unchangeable entity with no allowance for contradiction, argument or conflict. The contemporary "ecological pyramid" have evolved since the end of the last century from the "Eltonian Pyramid of Numbers" of the British ecologist Charles Elton, culminating with a universal conception of the ultimate and totalitarian pyramid. One, that brings together the "Metatheory" science with the renaissance of "Darwin Theory of Evolution": it conceives the totality of Life - society included-, as a universal system, "scientifically" explained as a hierarchically organized machine and compared with the free-market competitive mechanisms². Other conception of the "total human ecosystems" is based on the convergence of "Thermodynamic Laws", "Systems-theory" and "Bio-cybernetics" which "...is the recognition of the hierarchical organization of nature as open systems with increasing complexity through newly emerging qualities at each higher level..."³. The tradition of "ecological hierarchies" has reached its most popular expression with the

¹ Ibid, p. 101

² Shalte, Evolving Hierarchical Systems, p. 217

³ Naveh, Z., Landscape Ecology as a Scientific Educational Tool for Teaching The Total Human Ecosystems In: Environmental Education. Principles, Methods, and Applications. Plenum Press. New York, 1980. p. 150

conception of the totality of Life on Earth as a living, self-regulated organism named "Gaia" which balance is based on "hierarchical mutualism" and behaviourism, according to which "...the behaviour of the parts must serve the interests of the whole"¹.

In the last three years I have observed at different conferences four versions of the patriarchal ecological pyramids with the layered vertical representations of the "Realm of Ecology", presented to the audience by four different male speakers to support their views. These "ecological hierarchical pyramids" will be adopted to illustrate the patriarchal value-hierarchical thought which..."By attributing greater value to that which is higher, the up-down organization of perceptions, mediated by a logic of domination, serves to legitimate inequality..."².

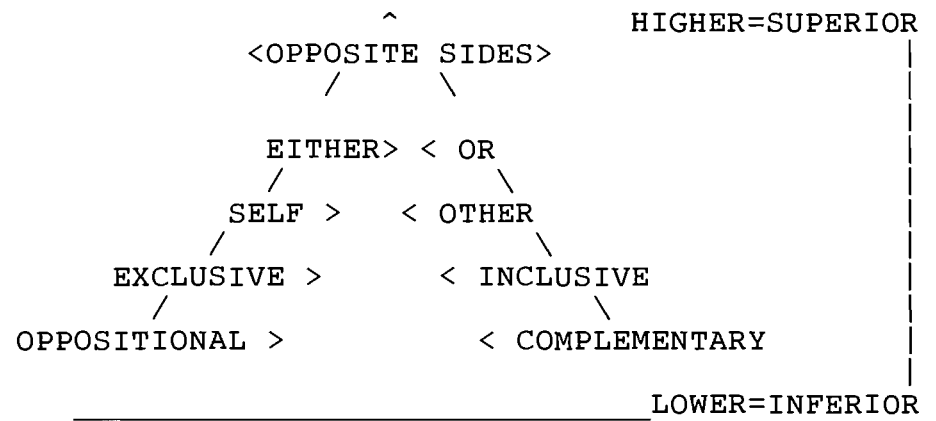
The patriarchal thought -based on dualistic, oppositional analysis of the reality, categorizing concepts in vertical layers from "top" to bottom"-³, could be represented as a pyramid:

¹ Bunyard, GAIA, the Thesis, the Mechanisms and the Implications, p. 155

² Warren, K., Opus cit. p. 6

³ See the concept of "value hierarchical thinking" of Elizabeth Dodson Gray: quoted by Warren, Opus Cit., p. 6

PATRIARCHAL NORMATIVE DUALISM- OPPOSITIONAL THOUGHT



5) REAL quest for a non-linear, non-hierarchical thought

From a REAL perspective, the visual representation of the rich complexity of Life is seen in the permanent movement and always changing rotation of entangled vortex-spirals: such as the Maori patterns seen in "mokos" or face-tattooing, wood and bone carving, painting and decorations. Living vortex-spirals can be seen in the sea, whirlpools, whirlwinds, seashells and flowers. Pictures of galaxies show that they also move in vortex-spiral patterns. For twelve years I have observed these vortexes -some to the right, some to the left-, in the finger-prints and in the "crowns" of the heads of hundreds of REAL participants in Venezuela and in New Zealand. Their hair, starting from a central point grows in spiral-patterns towards a definite direction: in most of the cases it grows clock-wise and only few in an anti-clockwise direction. Rarely, I have found people with two or three or four hair-spirals growing in opposite directions.

I will argue that the visual representation of Life would be like these hair vortex-spirals: like an infinite continuum of vortex-spirals entangled within the radials of the webs of the orb web spiders "Araneidae" which hubs expand in a series of spirals, some starting in anti clock-wise, then changing into clock-wise direction. I will adopt the patterns of the "Araneidae orb webs" for

the visual, symbolic representation of Life within a REAL non hierarchical, non-linear complex thought ¹.

These infinite webs would be anchored within waves of time and space without any "up" or "down", nor linear verticality, superiority-inferiority or opposition of pairs: all of which, -on the contrary-, would suggest hierarchy. In the symbolic pattern of the orb spider-webs, Life is seen in the always changing concentric vortex-spirals representing individual cycles of birth, growth, maturity, reproduction, decline, death and decomposition; in the non-hierarchical inter-dependence of individual organisms, populations, communities and ecosystems all inter-connected by dynamic exchanges of matter, information, learning and energy; although these exchanges and relations of inter-dependence are not more -or less- important than the relative autonomy of individual cycles. Nevertheless, the example of the visual representation of the non-hierarchical representation of Life as vortex-spirals entangled in spider orb webs, could be only applied to Nature and can not be used to represent Society, which is hierarchical:

Whatever has turned human beings into "aliens" in nature are social changes that have made many human beings "aliens" in their own social world: the domination of the young by the old, of women by men, and of men by men. Today, as for many centuries in the past, there are still oppressive human beings who literally own society

¹ This document must be written according to academic guidelines which express the hierarchical, linear and vertical system of thought of successive chapter-categories as "inputs" and "outputs"-. These academic guidelines will be challenged in Chapter Four.

and others who are owned by it¹.

Maybe the only societies that could be entangled in the "orb webs" of Life are the people who have lived for thousands of years in the rain forest and have developed a particular nomadic culture in harmony with their environment: hunting, fishing and gathering according to the seasonal rhythms and the ecological cycles of plants and animals; without producing waste since all objects they use are "organic" and "bio-degradable"; whose social organization is non-hierarchical and have resisted or never accepted the influence from the "civilized" society: such as the People of the rain forest. But to think that they are the only model for humans to live in an ecological and non-hierarchical society, would be reductionistic. On the contrary: as I proposed in 1979 - when I was living in the small town of Canoabo, Carabobo State in Venezuela-, the REAL thesis is opened to the possibilities of social, cultural and ethical change guided by ecological consciousness and wisdom where the individual could be free from any form of hierarchical domination and "to live in harmony with self, with others and with Nature".

6) Global Extinction of Life

As a result of the above "social changes" resulting in human social alienation, a matter of concern for all

¹ Bookchin, Remaking Society, p. 39

nations in the current decade is that for the first time since humans exist **all** forms of life in planet earth - without exception-, are endangered by global imbalances of Nature such as: genetic erosion, acid rain, green house effect, radioactive and chemical waste, destruction of the ozone layer and of deforestation, desertification, oil spillage and polluting agriculture, to mention just few. Even if the anti-ecological causes for such imbalances were immediately halted today, the process of detoxification for reaching again the natural healthy balance of the eco- systems, would take hundreds of years:

To begin with, it now seems clear that the self-regulating, self-cleansing mechanisms of the earth's ecosystem are losing their capacity to cope. The drift towards contamination overload seems inexorable, even in the face of ambitious efforts to slow its momentum¹.

And the "contamination overload" happens to be rampant in the two societies adopted by all nations as their "models": the liberal-capitalist and the Marxist-socialist. In the capitalist world, society is immersed in free-market consumerism: its rules are competition and greed for achieving permanent growth and expansion of private property, profit and power, concentrated in an elite². In the "Second World", highly polluted countries of socialist Western Europe ruled by ecologically ignorant bureaucrats. The Marxist question: "Can

¹ Bellini, High Tech Holocaust, p. 252

² See the analysis of the economic and ideological basis of the neo-liberal New Right in Chapter Two, as the framework for the REAL case study in New Zealand.

Capitalism Go Green?", suggests another question: "Can Socialism Go Green?"¹. Socialist countries are in the process of dismantling the centralised state and its totalitarian collectivism. The actual "revolution" for becoming "free" from oppressive socialism, is moving fast towards slavery of capitalist-style consumerism.

a) Gender-Free Global Hierarchy of Nations

All over the world, communities of all nations are immersed in the global hierarchical mechanisms of the consumer's society and have adapted themselves to live in chaos, in an artificially-made life, enslaved by consumerism of superfluous products and services and surrounded by their own waste and pollution. The communities live within the dualistic polarization of "rural-urban" dichotomy, trapped within the world economy in transition: from a pastoral-industrial era moving into a cybernetic era towards a highly technological and still more competitive society, based on international trade of importing and exporting raw products and on processed merchandise between the hierarchy of nations.

The gender-free analysis of the global hierarchical of nations could be visually represented with a layered pyramid of first, second, third, fourth and fifth world countries. The actual neo-colonialist system of global

¹ Richards, Can capitalism Go Green?, p. 18-23 In: Living marxism, February, 1989

economy originated when the "first-white" world inherited capital accumulated during the expansion of the european empires through centuries of colonialism, based on slavery, cruelty and extermination of the native population of "yellow" Asia, "Black" Africa and "Brown" Latin America. Ceaseless imperial pillage of raw materials and massacres of people for the imposition of political, cultural, religious and military systems, kept the hierarchical order between nations for above and beyond revolutions for national independence.

The economic growth, expansion and power of the rich countries after the Second World War, was based on the neo-colonial patriarchal hierarchy which grew thanks to an International Division of Labour (IDL) based on economic and political violence against Nature which "raw materials" were produced by violence against people, in order to achieve very cheap or "invisible" labour in the ex-colonies -now charitably named as the "developing nations". Those raw materials were processed in the "First" world nations by expensive labour force and machinery for making expensive products which were exported back to the Third World: debts accumulated in order to pay for "First" world products and destructive tools, heavy machinery and polluting technologies.

While capital accumulated in the industrialized european countries, the "First" world workers enjoyed general wealth, based on the "under-development" and

exploitation of the "Third" world. Commercial consumerism and the "waste culture" displaced the local culture, while self-reliant traditional systems of life in tune with Nature, were substituted by inhuman conditions of industrial life in over-populated megacities surrounded by slums of misery:

This relationship led, as we know, to ever-increasing wealth and growth in the industrialized countries, accompanied by greater wage demands of the workers who were also participating in the growing wealth based on the exploitation of the colonies and their workers¹.

As Eduardo Galeano says, in the introduction of his book: "Open Veins of Latin America": "The division of labour among nations is that some specialize in winning and others in losing"². Hence, the two case-studies in a "Less Developed Country" of the "Third World" (Venezuela) and an "Over Developed Country" of the "First World" (New Zealand), could be represented within the global hierarchy of nations as a "gender-free" pyramid of exploitation and power.

¹ Mies, Patriarchy and Accumulation on a World Scale, p. 112-113

² Galeano, Open Veins of Latin America, p. 11

The process of growth of the above pyramid of power started in 1970 when European, Japanese and U.S.A. Transnational Corporations (TNCs) started to reverse major systems of production to the "Third World" countries in order to avoid the rising costs of production in the "First World". There, production had become "expensive" due to the demands of unionized workers claiming for higher wages and better work conditions and stopping production with union strikes.

With the shifting of TNCs to the Third world started a new form of exploitation: this time, of "Third World" women, who were preferred to men as workers. Women were placed in large scale manufacturing industries¹, in household production of handicrafts and food processing, conveniently named "informal sector"; in the production of "luxury food" agriculture for export based on family labour in plantations, sub-contracted by companies and in pornographic and prostitution industries². Women of the "Third World" are even more exploited than men according to "the extraction of surplus within patriarchy (which plays a key role in the determination of other gender relations)..."³.

¹ Such as electronics, textiles, garments and toys

² See: Mies, M., Chapter Four. Housewifization International: Women and the New International Division of Labour, In: Patriarchy and Accumulation on a World Scale , p. 112-113.

³ Walby, S., Opus cit. p. 55

Based on the exploitation of women, products made in the now called "developing" countries, were to be exported to the "rich countries": the cheap, to be consumed by the workers; the expensive, for the "blue" and "white" collars and the ultra-expensive, for the exclusive use of an elite. Tourism, sex and drugs industries, also grew and expanded¹ to the point that: "Of the 100 biggest economic entities on Earth, half are countries the other half mega companies..." which "control 25-30% of the global processing and marketing."² although the exploitation of women is at the core of the "global processing and marketing".

As an expression of the above tensions and contradictions, two theories have developed about the role of TNC in Third World countries. One position is held by the *Bargaining school*. They argue that the actual tendency of the national governments of the "Less Developed Countries" (LDC) favours the capitalist system because MNC contribute to "develop" the economy, offering new opportunities for education and employment and promoting the general wealth of the population. According to the *Bargaining school*, during the decades of the 1960's and 1970's, many governments of the LDC confiscated the assets of Multinational Corporations and

¹ Mies, Opus cit., p. 114

² Myers (Editor), Ibid., p. 209

nationalized their own natural resources, influenced by "Marxist communism" or "socialist collectivism". This school assume that there have been no more confiscations since the eighties, because...

...power relationships evolve and shift over time, with a trend of increasing power of LDC governments as long as they formulate and follow correct public policies. On the whole, the bargaining power of LDC governments has increased for two reasons: they have moved up on the learning curve of how to deal with MNCs. and, with the re-industrialization of Europe and Japan, there are many more multinationals competing in each industry than there were when U.S. multinationals dominated the international economy¹.

The above assumption of "increasing power of LDC governments..", has been challenged in the thesis with the analysis the over riding power of the New Right elite, acting politically behind Transnational Corporations (TNC) and at high levels of decision of the national governments not only in a LDC of the "Third World" (such as Venezuela), but also in DC of the "First World" (such as New Zealand).

The other theory on the role of TNC in the Third World, is the *Dependencia school* meaning "to be dependent" or/and "subordinated". According to this framework, the manipulation of the global economy by MNC towards *The Wealth of Nations* predicted by Adam Smith in 1776, means that the "Third World Nations" continues being the "Pandora box" of the neo-colonial order making possible the First World wealth:

With 75% of world population, developing countries

¹ Chauduri, MNCs and LDCs: Changing Dynamics in "Economic Impact", p. 61

earned only 13% of its exports income in 1981. Eight states earned 58% of this, while over 60 relied on the low value, unstable commodity markets¹.

Dependencia means that MNC continue the neo-colonial exploitation of Asia, Africa and Latin America as providers of raw materials, cheap or free "invisible work of women", after-hours labour, and non-unionized labour force. These conditions makes current "wealth and development" grow. However, these concrete conditions in the 1990's are possible because they are the continuation of the same conditions established through centuries of imperial colonialism as follows: firstly, the "wealth and development" of european empires with their aristocracy, merchants and bankers in colonial times, was built over the pillage of Nature and the slavery and oppression of the People in the Third World. Secondly, these conditions became the foundation in which the current "wealth and development" of the First World nations is built today. The Third World continues being exploited to enrich the "wealth and development" of an international elite profiting behind the corporatized structure of Transnational Corporations. At the edge of global extinction, we are witnessing the process of dissolution of the nation-state, the "merging" of "blocks" of power and the political taking-over by TNC:

The nature of large corporations is profoundly inhuman. Competition, coercion, and exploitation are essential aspects of their activities, all motivated by the desire for indefinite expansion. Continuing growth is built into the corporate structure²

¹ Myers (Editor), Ibid., p. 208

² Capra, Opus cit., p. 233

And "continuing growth" is considered the aim of "development" for the "Less Developed Countries"(LDC) of the First World to reach -one mythical day-, the levels of "Development" of the First World. This myth is sustained by international programmes of "cooperation for development" and the "charitable" trends of the First World to help the "poor" Third World.

A gradual recognition that some of these terms are offensive led to the use of "developed/developing" and "more developed/less developed". All these terms, however, characterize the developing countries in terms of the standard of developed countries¹

The "Development Theory" is based on the assumption that the "under developed nations" will eventually be able to reach the status of the "developing nations" towards the mythical "development" of the already "over developed nations" in a relatively stable monetary world.

The "world monetary stability" of the International Monetary System is based on many biased measurements and sources for determining world statistics used by the politicians to regulate in economic matters. On the one hand, the voting power in the International Monetary Fund is hierarchical, giving the highest percentage to the U.S.A., followed by the U.K., West Germany, France and Japan while the GNP of Third World members of IMF, is not accountable enough to give them "voting power"². On the other hand, the fact that TNC have reverted the

¹ Opus cit., p. 412

² The Gaia Atlas of Planet Management, 1986. p. 231

production system towards the "cheap" Third World, raises concern in the political spheres of the rich countries. Their national economies have been affected with massive unemployment due to redundancies, while the companies are dismantling the -now "irrelevant" and "old"- industrial manufacturing and pastoral farming sector.

b) Global Patriarchal Hierarchy

The above gender-free pyramid of "First", "Second" and "Third" categories of nations, in reality is based on another pyramid that has been made "invisible" by the patriarchal system of the Sexual International Division of Labour (IDL) established after the Second World War which grew and expanded thanks to: "...gender inequality as the consequence of the interaction of autonomous systems of patriarchy and capitalism..."¹.

The following analysis avoids theories of patriarchy known as "Liberal", "Radical", "Marxist" and "Socialist"² since they could be useful as a framework for a "First">"Third" world dualistic analysis, but not for an eco-feminist perspective. Due to its flexibility, I have chosen the feminist theory of Sylvia Walby for its integration with a global perspective women in the world.

Her articulation of patriarchy with other modes of

¹ Walby, S. Patriarchy at Work, 1986 p.5

² See Jaggar, A.M., Feminist Politics and Human Nature, 1983.

relations -capitalist or not-, is based on a set of four "key sets of patriarchal relations" known as:

1. "Domestic work";
2. "Paid work";
3. "State violence"
4. "Male violence and sexuality".

These 4 "key sets" of Walby will be integrated into a global perspective¹ of the exploitation and oppression of women in the world; being Key 1, *Domestic Work*. Firstly, the "autonomous patriarchal modes of production"² are centered on the appropriation of unpaid housework and agricultural work:

The housewife is female labour power in capitalism: in a world in which money is the measure of all, she can be paid the least and need not be paid at all for the bulk of her work³.

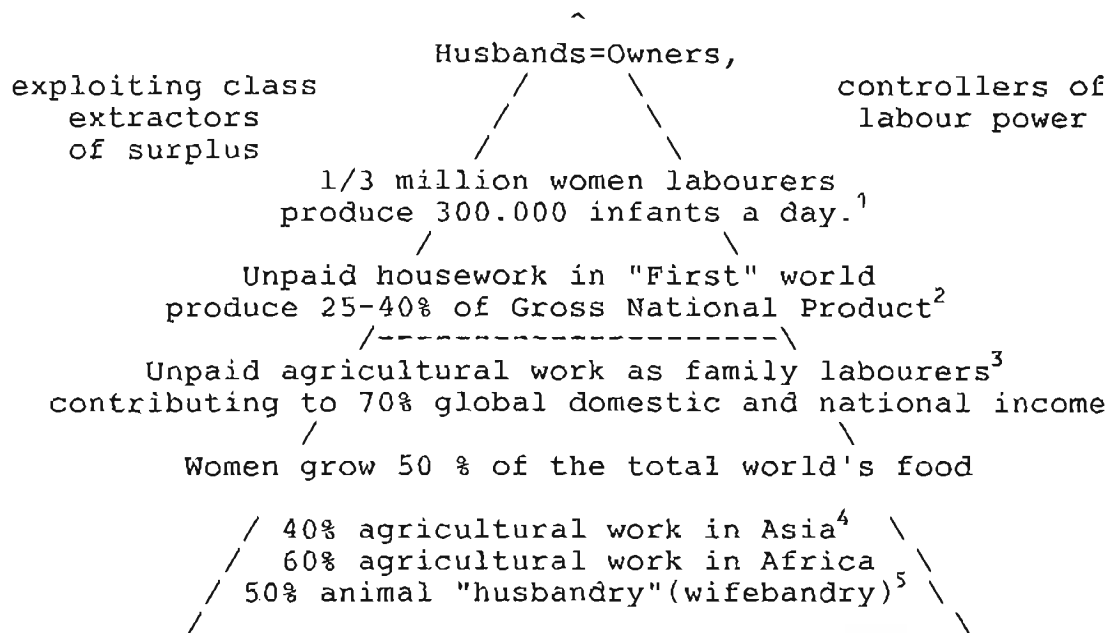
The labour of women within the "privatized" woman><man relationship in marriage or "de-facto" marriage could be visually represented as a global hierarchical pyramid of:

¹ Walby, S. Opus cit., p. 50

² Walby, S., Opus cit., p. 54

³ Wherlof, C., Why Do Housewives continue to Be Created in the Third World Too?, In Women.The Last Colony., p. 166

Privatized Woman><Man Relations



¹ For the "invisibility" of labour of pregnancy and childbirth, see: Women a World Report, 1985. p.3; Waring, M., Counting for Nothing, p. 22-24; and Mies, M., Benhold Thomsen, B, and Von Wherlof, Women. The Last Colony, pp 177-179.

² Women, a World Report, p. 4

³ Ibid, p.4

⁴ New Internationalist Co-operative, Women. A World Report, p.19

⁵ Myers, The Gaia Atlas of Planet Management, p. 162

Women -and children working beside their mothers or engaged in "professional" prostitution-, are not accountable enough for the statistical data.

Women are the optimal labour force because they are now being universally defined as 'housewives', not as workers; this means their work wether in use value or commodity production, is obscured, does not appear as 'free wage labour', is defined as an 'income -generating activity', and can hence, be bought at a much cheaper price than male labour¹.

World systems of economic measurement such as the "United Nations System of National Accounts" neither accounts for voluntary work of millions of people, nor for the household production of billions of women ² and 100 million children³.

Key 2. *Paid Work*. The global model of "hierarchy of nations" also changes, when is analyzed within the patriarchal mode of production in articulation with capitalism:

The structure of women's labour in capitalism has spread throughout the world because is profitable. Low paid and unpaid labour is the foundation of the modern economy and society⁴.

¹ Mies, Patriarchy And Accumulation on a World Scale, p. 116

² For an analysis of statistical "invisibility" of women see: Warring, M., Counting For Nothing 1988, p. 7

³ For a recent analysis of the "invisibility" of labour of children, See: Mpondah, D., Child Labour Flourishing Despite Bans , p. 18 In Forum, UN, 1989.

⁴ Wherlof, C. Opus cit., p. 166

The International Division of Labour was partially reversed in the seventies when TNC -in order to avoid high costs of production-, invested and organized subsidiaries in many countries of the Third World. Firstly, they moved their operations on mining and agribusiness; secondly, the electronic, textile and toy industries; later TNC expanded to automobiles, clothing and luxury-food processing. Patriarchal relations in *Paid Work*¹ must be seen in four modes:

Firstly, unequal opportunities in paid work. At the end of the Second World War, when capitalist and socialist industrialism grew and expanded over national frontiers, iron and charcoal technologies were substituted by steel technologies and by large, centralized and polluting sources of energy: hydroelectric, fossil-fuel and atomic energy. These changes brought unequal opportunities since men were preferentially trained and employed in these technologies rather than women; consequently women are now "...only one quarter of those employed in industry- in rich and poor world alike."²

Secondly, Unequal Wages in Paid Work: the wealth of the "First World" nations and MNCs is also possible, thanks to the patriarchal relations in paid work which

¹ Walby, s., Opus cit., p. 55

² Women, a World Report, 1985 p. 31

appropriates the work of women through unequal wages. Wage differentials between men and women vary in different regions, because the access to paid work is being controlled by the patriarchal relations of the state, the workplace and the household¹. On a global scale (in relationship with men), women: are 35 % of the paid workers in the world; earn 70 % of the men's wages or 70 cents per every dollar earned by a man in similar work; earn 10 % of the world's income and owns only 1% of the world property². For example, in New Zealand³, men are paid \$ 14.10/hour, while women are paid 11.40 \$/hour.

Thirdly, Unequal Hours in Paid Work. Patriarchal relations in paid work must be seen also in unequal hours, since the position of women in paid work is in tension with the relations within the man in the family⁴. Housework do not permit women to have the same number of hours of paid work as the man in the family. Besides, whereas she has to work twice combining waged work and domestic work, the man does not assume the responsibility of housework.

¹ Walby, S., Opus cit. p. 55.

² "A Woman's World": TV Series. Thames Television. PLC. MCMLXXXVI

³ As at end of February 1989. Department of Statistics, New Zealand 1990.

⁴ Walby, S., Opus cit., p.57

Patriarchal Unequal Hours

First World Women
 3 hours per week less paid work than men
 17 " per week more unpaid work than men.

/ Third World Women \
 4 to 10 1/2 hours p/w less paid work than men
 / 3 times more unpaid \
 / work than men \

Patriarchal relations in paid work are also based on unequal work since keep women in a position of disadvantage or "inferior" (less paid) jobs or what is known as "women's work"; for example, in the "First" world, women are paid 25 to 40 % less than men¹.

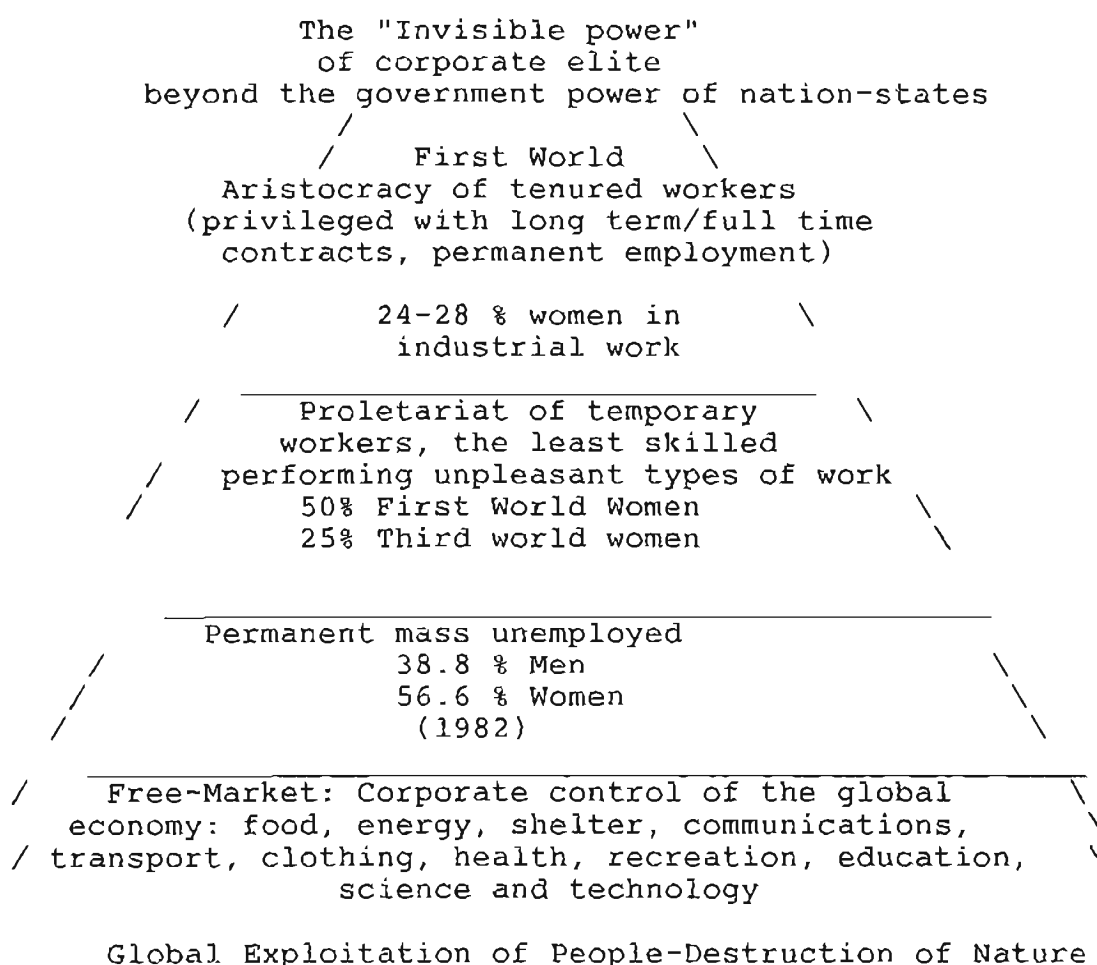
Key 3 is *State Violence*. Women are also subordinated to the patriarchal violence of the nation-state and the free-market corporatism. In the "First World" countries, under policies of free-market corporatism, we are witnessing the rising of a new era of dismantling the welfare nation-state and bringing up a new era of post-industrial domination and exploitation of People and Nature, based on permanent unemployment. The following hierarchical model integrates: Class Relations,

¹ The Gaia Atlas of Planet Management. Myers Editor, 1986. p. 192

Capitalist State and Gender Relations¹ into a corporate-state of patriarchal hierarchy:

¹ Walby, S., *Opus cit.*, p.57

Patriarchal Nation-State and Free-Market Corporatism¹



¹ Data for this pyramid, from Women. A World Report, 1985. p. 31-38 (Percents are based on female-male inequality)

Legal and political violence of patriarchy keep the women under unequal legislation which favours men: "Thirty one countries report that they are gradually dismantling discriminatory legislation, but thirty have admitted that they have not yet made a start."¹

Key 4. *Male Violence and sexuality*. Sylvia Walby regards "systematic institutionalized" male violence and sexuality as a patriarchal autonomous structure: not as the basis of patriarchy but as a factor that contributes to keep the patriarchal hierarchical order. The feminine analysis in "Women, a World Report" reveals a world perspective of male violence and sexuality which is devastating. Global battering, rape and sexual assault, uncovers that² 1/4 violent crime in the USA is "wife assault" and that 1/7 wives have been raped by their husbands in the UK ³. That 1 in 4 families are incestuous, while 80-90% girls all over the world are being sexually abused by their fathers or male relatives and 100 million young girls are repeatedly being raped by adult males in a year. The report also reveals that "mild" and "radical" female circumcision is commonly practised in Africa, Muslim countries, India, Australia, Mexico, Peru, and Brazil.

¹ Women, a World Report, 1985. p.83

² Ibid., p.65

³ Women, A World report, p. 65

Since the "human community" will be ten billion by the year 2.000 and -if the proportion women-men continues the same-, the above global patriarchal violence will have a devastating effect on 5 billion women. The destructive results of the global patriarchal order is mensurable in millions and tonnes. What has not been calculated yet, is the monetary value of the following losses: How much does it cost the life of a baby? How much does it cost to breath clean air?

GLOBAL DESTRUCTION OF THE ECOSPHERE¹

Loss:

People: -Rainforest people:
 extinction after colonization (50 % less)
 -Babies and young children
 death for hunger and malnutrition (15 million)
 -Seriously undernourished people (435 million)

Each year: Each day:

Air loss: - Lead poison
 human-made (450.000 tonnes)
 - Industrial
 sulphur dioxide (90 million tonnes)

Water loss: -Oil spillage (6 million tonnes)
 -Tonnes-Discharges:
 Carbon 2.600
 Oil/grease 870
 Nitrogen 520
 Iron 230
 Copper 13.8
 Lead 12.7
 Mercury 0.3
 PCBs 0.014
 -Acid rain:
 Sulphur dioxide (90 million tonnes)

Land loss: Desertification (25 million ha)
 Toxification (50 million ha)
 Erosion (50 million ha)
 Non-agricultural
 uses (150 million ha)

Forest loss: Approx. size of
 England (12 million ha)

¹ Source: The Gaia Atlas of Planet Management, Myers Norman Edit., 1986. ps. 41, 43, 49, 84, 119.

Facing the above complex reality of the current decade, I have adopted a specific theory of change which blends principles of Eco-Feminism into a new conception of Adult Learning. Eco-Feminism is starting to offer a coherent theory of patriarchy that enriches both: "ecologist" and "feminist" movements, empowering people engaged in genuine struggles that challenge the exploitation and oppression of Nature and women.

The concept of Eco-Feminism in itself reflects its dualistic origin of two movements that, until ten years ago, were evolving in parallel although different directions. However, the conscious effort of integration by few authors is a struggle in itself and they have individually approached the subject from the viewpoints of their particular ideologies. This makes difficult to adopt a position on Eco-Feminism without biases or ambiguities, which could be used to the advantage of patriarchy.

Such ideological diversity in Eco-Feminism will require additional intellectual and practical efforts in order to blend similar arguments, claims and assumptions proposed by different authors. The result could be an integrative theory which accepts multiple theories, multiple methods of research and multiple actions aiming to finish the patriarchal exploitation and domination of women and Nature. The integration of Eco-feminism and Ecological Adult Learning is REAL.

a) Real Ecology Adult Learning challenges gender-free analysis of society and some biased "eco-feminist" approaches such as the ones identifying planet Earth as a "mother" or sex-typing it as a female.

b) REAL challenges "scientific" or "ecological" determinism or reductionism, especially those in the form of "ecological hierarchies".

c) REAL challenges any type of "Adult Environmental Education" which aims towards hierarchical "development" and "economic growth" in capitalist as well as in socialist societies.

d) REAL challenges any hierarchical system which leads to the exploitation, domination and manipulation of Nature and People.

e) REAL challenges any form of the emergent "Green Consumerism" manipulated by Transnational Corporations, based on the hierarchical exploitation of people by an elite moved by the Profit Motive.

f) REAL challenges any trend -ideological or material- of the neo-liberal New Right and the imposition of global anarchist capitalism.

g) Through a process of empowering People, REAL will challenge any "educational" or "training" programme leading adults into passive conformism and passive dependence, hence, contributing to the perpetuation of the patriarchal hierarchical society and the destruction of People and Nature.

CHAPTER IV

Real Guide Lines For Action

This chapter deals with the practical implementation of REAL. It intends to offer general guidelines, that maybe useful to adult teachers and community workers engaged in formal or non-formal educational programmes or projects, who are concerned with ecological and social chaos and searching for a theory of change that could be adapted to their local reality and the concrete needs of their own communities. Real Ecology Adult Learning REAL, is an individual-personal and a collective-group process, which aims to become a life-long and permanent search for new ecological habits, knowledge, attitudes and values, toward non-hierarchical and ecologically balanced communities. The introductory REAL process that could take from twelve weeks to a year, on a full-time basis, could be structured as a course or as a series of workshops or as successive and continuous system of learning modules. Progressively, individuals that bring to the group their different life skills, knowledge and experiences and ideological backgrounds, become active "participants" in a collective learning process, which at the same time encourages and respect the individual autonomy. REAL starts with activities that relates the individual, personal needs with the tensions and concrete needs of the group and relates the needs of the group with the needs of their local communities, towards

ecological habits, skills and knowledge, and towards creative initiatives, attitudes and values.

The REAL process rises individual sensitivity, awareness and conscious understanding of the inter-connections between Humans, Culture, Nature and Information on a personal, community, local, regional, national and a global level. The learning process of the participants includes activities for the diagnosis of anti-ecological habits and attitudes of the individual and the community as well as the diagnosis of the anti-ecological trends of local private business sector and public governmental institutions. REAL curriculum proposes activities for the sensorial, perceptive exploration of the concrete reality through living, experience and knowledge of the local, natural and human-made environment.

The first stages of socio-ecological awareness are followed by conscious understanding which would lead the individual to a continuous self-learning process. Individually or collectively, REAL participants will try to find evidences of socio-ecological imbalances through activities of critical analysis: for example, in order to uncover false "green" images of local politicians or the role of the new "green" Multinational Corporations (MNC) in their own regions. The participants will try to uncover the frameworks that make "invisible" the hierarchical roots of environmental destruction and

social chaos. REAL involves physical work, outdoor activity, to practice new skills and to constantly search for new knowledge. It is a process of personal change of old anti-ecological habits, into new habits, attitudes and values incorporated into the individual, everyday life. It is also a process of collective work in responsible teams, learning in groups, taking decisions and solving problems and conflicts together. REAL also aims to be expressed within organized collective actions for local social change and -eventually- as a political action "towards an ecological society"¹. After REAL process, some people -according to their own previous ideological backgrounds-, start to actively participate

¹ "Hacia Una Sociedad Ecologica" ("Towards an Ecological Society") was the name I gave to the fourth theme of an educational programme that I started to conceive and write in May 1979, when I was teaching for the "Simon Rodriguez National Experimental University" in the isolated rural town of Canoabo. I wrote the document, in response to a formal invitation of the Governor's Office of the Federal District to act as an adviser and coordinator of an educational programme on a national scale, which I entitled: "National Course for Instructors on Recycling, Non-Polluting Agriculture" and other ways Toward an Ecological Society". The proposal was officially approved in a meeting on the 11-7-1979 (see Chapter I) with the attendance of representatives of different ministries and other public institutions; since that day, the name of the fourth theme was simplified by everybody as: "Hacia Una Sociedad Ecologica" which started to be used as the common name of the programme.

I was very surprised to discover last year (1989), in the library of the University of Canterbury (Christchurch, New Zealand), that it is also the title of a book, published in 1980 by Murray Bookchin, one of the most important authors of Social Ecology in the world. In May 1979, "Hacia Una Sociedad Ecologica", would remind me of past experiences as student at Goddard College in Vermont, and would also remind me of the seven organic and bio-dynamic teachers in the U.S.A. who, during 1976-1977, guided and inspired my educational work. Unfortunately, I was not one of Mr. Bookchin students at Goddard College.

in reformist "environmental" or in radical "ecological" movements for social and ecological change: some start to share REAL with their own family, friends and neighbors. Some start REAL projects in their communities. In that sense, REAL activities of creativity development, includes a quest for ideal models and new forms of organization towards a society of ecological communities "...where humans could live in harmony with themselves, with others and with nature."¹

It follows a REAL curriculum for adult and community teachers, that could be adapted to the concrete needs of the local reality. The following circular diagram (based on the model of the concentric spider-web of the "Aranea pustulosa"), represents the "REAL Theoretical Context for Action". Each segment of the network is explained as an independent unit but -in the practice- all become integrated by the AIMS and GOALS. The model facilitates the perception of 30 aspects of REAL, organized within 5 sub-contexts that inter-relates a variable number of categories each:

¹ Suarez, O. "La Basura es un Tesoro", p. 16

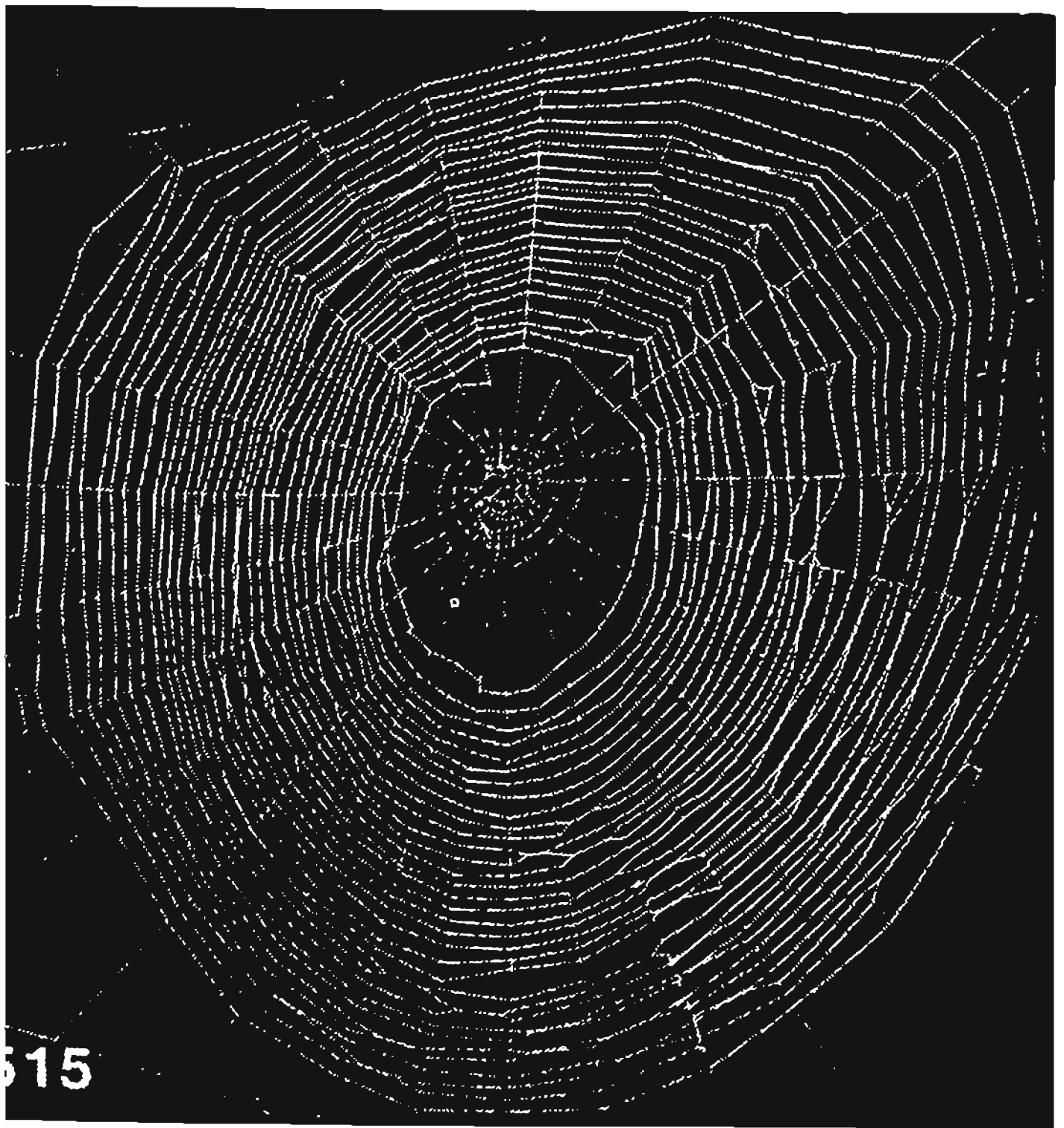
Context: METHODS OF ADULT LEARNING
Living Knowledge
Theoretical Development
Practical skills
Work in teams and group
Creativity development
Critical analysis
Evaluation (Self, team, project)

Context: LEARNING
Humans
Exosphere
Interaction
Culture
Information

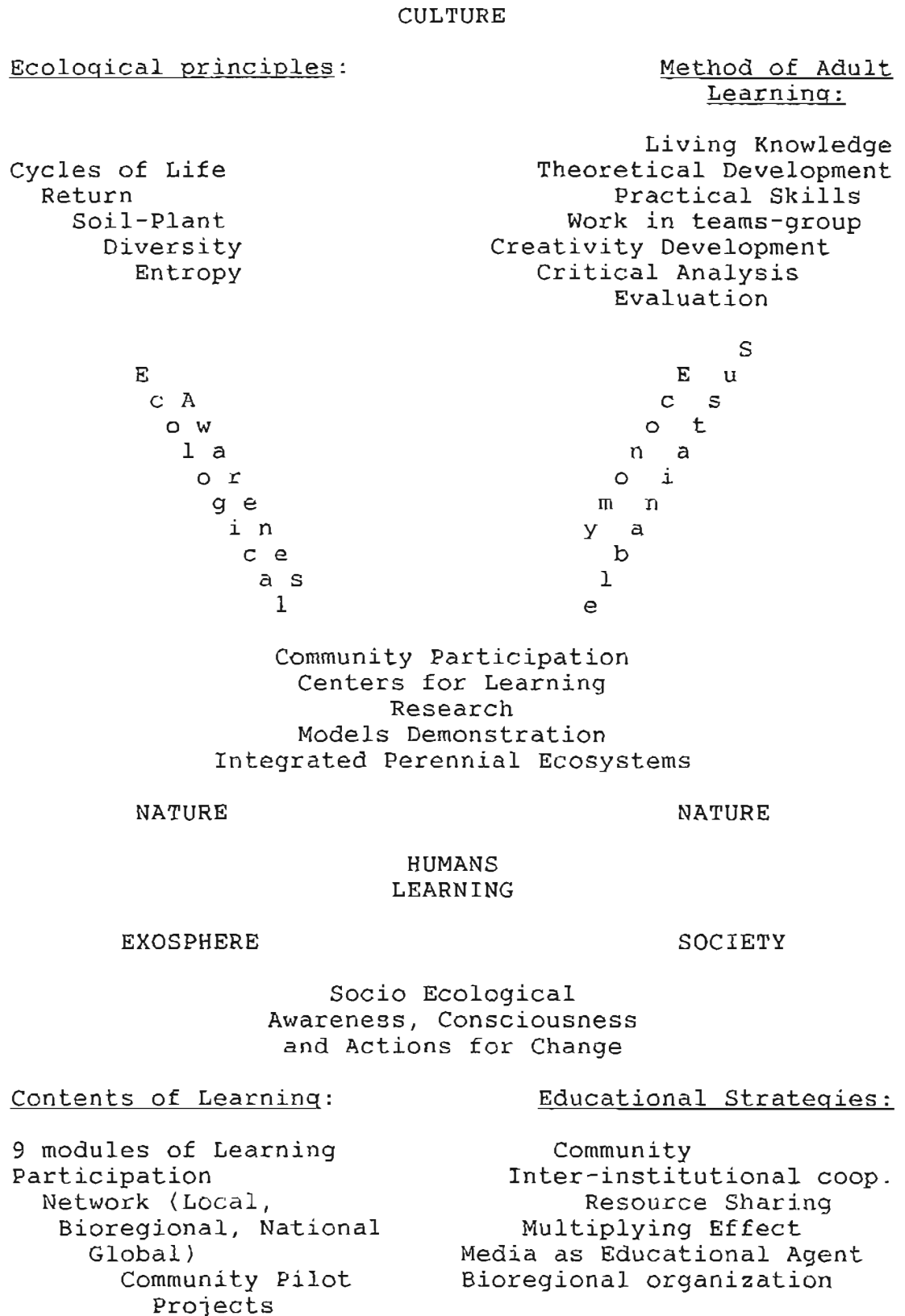
Context: ECOLOGICAL PRINCIPLES
Law of Interdependence of Life Cycles
Law of Return
Law of Soil-Plant Organism
Law of Unity in Diversity
Law of Entropy

Context: CONTENTS OF LEARNING
9 Learning modules.
Network (Local, Bio-regional,
national, global)
Pilot Projects

Context: EDUCATIONAL STRATEGIES
Community Participation
Inter-institutional cooperation
Resources sharing
Multiplying effect
Media as educational agents
Bioregional organization

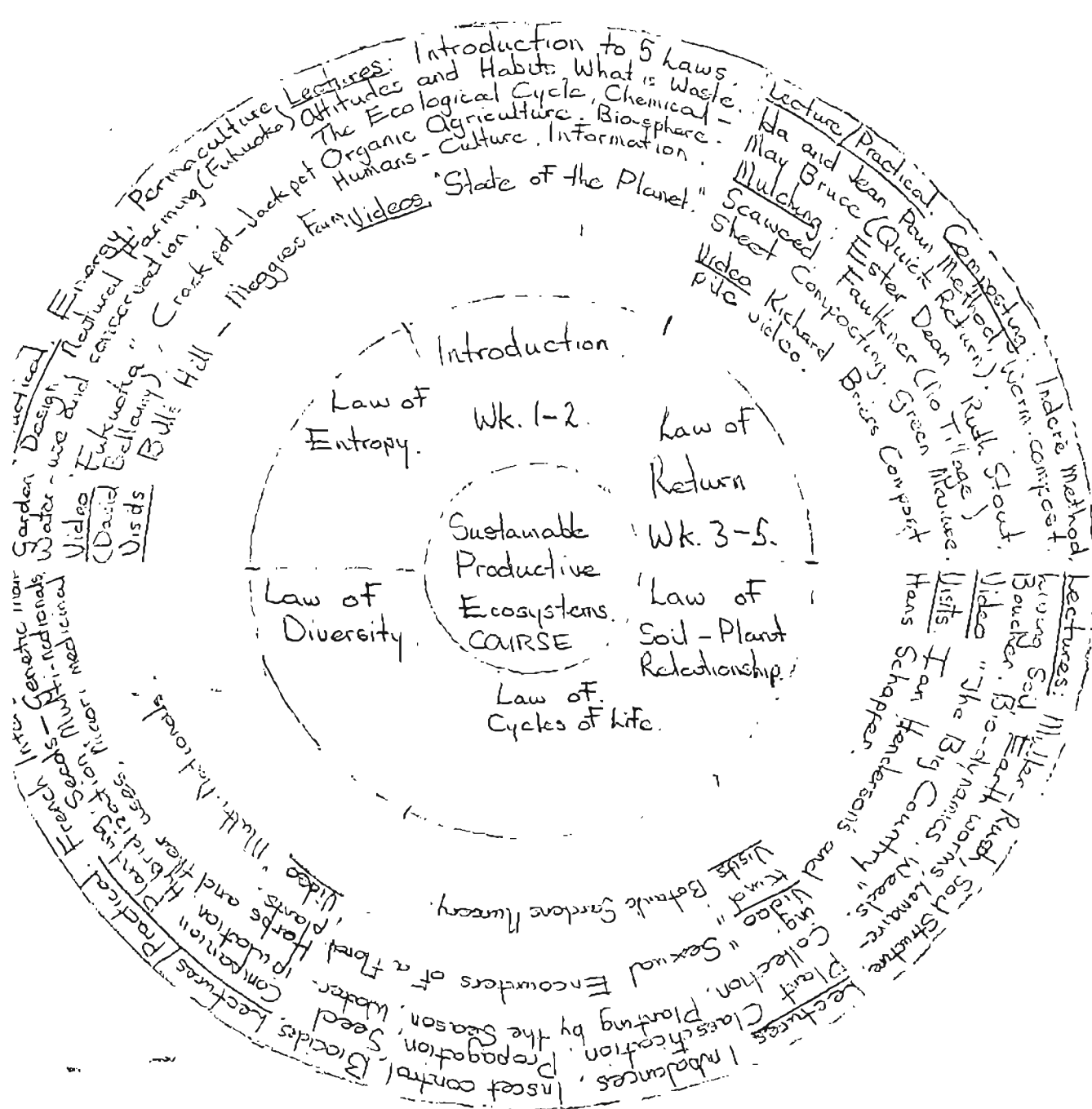


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Diagram: REAL THEORETICAL CONTEXT FOR ACTION







INFORMATION

Description of the above REAL Theoretical Context for Action:

The following REAL process evolves on time, as a continuous, permanent, self-managed and self-responsible collective process of empowerment of people towards social change. The minimum number of people is 2, the maximum is 18 and the optimum number is 15 (in 1979 there were 70 participants in one course). This process has been applied in Venezuela and in New Zealand, to weekend workshops as short as two days and to different courses of variable length as long as 45 weeks on a full-time basis. The name of the REAL courses have also varied on time but -although the concept "Social Ecology" was never used to define them-, the courses were based on REAL principles. Some of the names have been: "Course for Instructors of the Community on Recycling and Non-Polluting Agriculture", "Course for Guides-instructors of the Children's Museum", "17 Methods of Non-Polluting Agriculture", "Organic Horticulture", "Organic Gardening and Farming", "Recovering Waste Land"¹, "Sustainable Productive Ecosystems", "Bio-Dynamic Gardening and Farming", "Permaculture Design", "Eco-feminism" and the

¹ Suggested by a New Zealand friend in 1975. I did not know that the same name was used by the New Zealand Settlers, for whom the natural eco-systems of Canterbury, specially the swamps and native bushes were "waste" to be drained, earth filled, cultivated and built with english style houses.

"Christchurch Environmental Education Trust"¹. All these diversity, reflects the needs to popularize REAL adopting names more familiar to people than "Social Ecology", which -in the opinion of many friends and people supporting the REAL courses in both countries-, sounded "too academic". Their advise was that I had to adopt more common names for the courses, specially favoring the concept "Organic" which, since the 1940's, has become the synonymous with "healthy", "ecological", "natural", and "environmental". Nevertheless, the concept "organic" is also confusing and ambiguous, since it could be identified with the concept "organic intellectuals" coined by Antonio Gramsci in the 1930s. One of its interpretations would be "...the collective expression of the new consciousness of the working class through its own social organization-such as political parties-..." or "...individual members of the peasant/working class."² The above definition of "organic intellectuals" would be misleading, since for REAL participants, the be "organic" means to work with organic³ matter, with compost, mulches, green and liquid

¹ See the critical analysis of "environmental education" in this chapter: 3. "Critical Review of Bibliography on Adult Environmental Education"

² Hall, Participatory Research, Popular Knowledge and Power: A Personal Reflection , p. 11.

³ It does not means that it do not use "inorganic" materials. On the contrary: pulverized and untreated rocks such as basalt, granite, dolomite, rock phosphate and green sand are some of the most common minerals used in the "organic" method.

manures: all made up by ecological conscious people in order to feed the living soil; "organic people" are challenging the use of chemical poisonous salts made by petrochemical corporations, in order to make money. In REAL, to be in the "organic movement" means to belong to and to participate in a global network of millions of people that are challenging the roots of the agro-chemical food business. REAL includes the organic method as a "content of learning" but is not its exclusive content: organic is just one of 17 methods of the non-polluting food production; besides, REAL is not limited to the analysis of food systems. At the present, it is important that new courses in the actual decade, start to be identified with REAL.

REAL aims towards a horizontal integration of individual life experiences and dynamic learning interactions between the participants, towards group wholeness and individual creative expression. In REAL, the difficult task of becoming free of hierarchically structured learning situations is very gradual, in order to avoid the crisis of adults participating in extreme unstructured situations, taking decisions by consensus:

The sensation of disorganization, the insecurity, the fear of evaluation and the fear of freedom, were some of the resulting symptoms of the experiment in the participants. Fear, in particular, was terrible. This fear is natural. All our lives have been a search for external securities: of our parents, of our organizational systems, of our systems of thought. To be free implies to find that security inside ourselves: to trust in ourselves. That confidence can be found only after the exercise of freedom.'...' Some individuals never found it- they need, indispensably, the external securities; others instead, find it (freedom) very

easily¹.

Consensus is only possible if it is accepted by the group without exception. Any challenge to it will bring confrontation, struggle for leadership, power and conflict². After three or four or weeks interacting on a full time basis (7-8 hours a day, weekly), learning and working togetherness under structured situations previously planned by the "facilitator" (s), who also coordinate and facilitate learning situations and resources, REAL participants start to reveal the degree of independence they want to have (or not): at an individual level and at a collective level. Also the potential for leadership of some individuals and the popularity of some members of the group, start to be evident. At this point it is important to adjust the levels of structured and unstructured situations to individual, as well as collective needs of freedom and independence within the group, in order to avoid the "tyranny of consensus":

A tyranny of consensus, like the famous 'tyranny of structure-less-ness', demeans a free society. It tend to subvert individuality in the name of community and dissent in the name of solidarity . Neither true community nor solidarity are fostered when the individual's development is aborted by public disapproval

¹ Simon Rodriguez National Experimental University. Anders Halstrom: Untitled document. Paper on Responsibility and Organization. Photocopied document for the participants. October, 1974. Quoted In: Segovia, L. & Farias, I.,

"Evolution of an Utopia putted into Practice: The Case of the Participatory Administration of the Original Nucleus (campus) of the Simon Rodriguez University" . Caracas, Venezuela, 1979

² See: Ruddock, R. Sociological Perspectives on Adult Education, p.40

an his or her deviant ideas are 'normalized' by the pressure of public opinion¹.

REAL starts with an introductory module introduction to each other (background, expectations, motivations, life experiences, preferences); introduction to REAL context; exploring the physical environment, natural and human-made, where the main sessions will take place and the surrounding community. Introduction to the "Method of Adult Learning". It is a process of empowering people in three stages: firstly, a structured situation that includes one or more people² temporarily planning, coordinating, facilitating and following up the processes of learning of the individuals and the group (including their own process). The facilitator(s)-participant(s), proposes pre-determined REAL aims and goals to the group but, at the same time, promotes the discussion in the quest for definition of REAL own individual and collective aims, goals and specific objectives; also in the first stages, the facilitator will organize and look for learning resources, learning environments and sources of information. In a second stage, the individuals have become a "group" and the participants have been already introduced to the Method of Learning, the Ecological Principles, the introductory Contents of Learning; it has also organized itself in responsible teams for self-

¹ Bookchin, Remaking Society, p. 176

² At a certain stage, institutional pressure in New Zealand determined that the courses were hierarchically pre-determined, administered and controlled, instead of "facilitated".

management, it has developed activities for the diagnosis of the reality and it has already started to solve problems and to take decisions together. At a third stage it is expected that, individually and collectively, the participants will eventually start to take responsibility for their own continuous and independent learning process. The participants work towards the application in the practice of knowledge and skills, participating in the planning, coordination of the course; implementing theory in the practice and searching for resources.

At this stage it is also expected that each individual will bring their life experiences actively into the group and that each individual would eventually facilitate the learning process of others: within the group and in the community. Each group becomes an original and unique entity and its particular collective expression will have an effect in each person and with in the environment:

The relevance of group theory for adult education is plain enough. The studies of leadership, task and group maintenance, interaction and communication, interpersonal choice, collusion, ambivalence and masking find their application in any adult class¹.

The process towards adult independent learning varies, according to the background of the individuals coming into the group. Also, I have observed that, if most of the participants have an "academic background", tertiary levels of education or intellectual

¹ Ruddok, R. Sociological Perspectives on Adult Education, p. 38.

inclinations, the learning tendency of the group will be towards activities of "Theoretical Formation" and "Critical Analysis" (See 2.3.) and they would ask for "more formal lectures". Their notebooks are impeccable, they will organize the printed information for permanent references, they will volunteer to read for others in "Collective reading" activities, they would prefer intellectual work indoors and would like to go to the library for bibliographical research¹. If most of the participants in the group are illiterate, have strong feelings of rejection to the schooling system², or have a practical tendency of "doing" and not "talking about doing", the group will follow a tendency towards "Practical Skills", "Pilot Projects" and "Team work" activities preferring to work in outdoors conditions. Each REAL group is unique, since "Groups are societies in miniature. Group processes reveal basic social issues as they occur-power and democracy, conformity and idiosyncrasy, hostility and acceptance, myth and

¹ In Venezuela as well as in New Zealand one of the major educational efforts have been the compilation of a very extensive bibliography related to ecological issues. In Venezuela, through the network of public libraries, corners of consultation were implemented. In New Zealand since 1985, in the Library of the Christchurch Polytechnic, we started to influence in the acquiring of specialized literature which has been cataloged under a special heading as "Sustainable Productive Ecosystems". Also there is a special "corner of consultation" which provides boxes of information "from the A to the Z"

² This rejection to the schooling system was very noticeable between unemployed adults that participated in SEAL 1985-1988.

reality"¹ One REAL effort is to provide the infrastructure for the support for adults with specific needs such as: literacy skills, individual centered learning, therapy gardening for people with specific physical disabilities, self-confidence and self-esteem and, if it necessary, counselling. REAL tries to provide a learning environment adapted to individual needs as well as to collective needs.

(1) REAL Aims:

- a) To become socio-ecologically aware, to develop critical consciousness and to challenge any form of exploitation, manipulation or domination of Nature and People
- b) To learn from the popular knowledge of the community
- c) To search for popular traditions of pre-industrial cultures
- d) To research contemporary, ecological methods and appropriate eco-technologies
- e) To identify, to discriminate and to select different theories for change, integrating them with their own needs, in their particular local reality, setting up their own goals, objectives and actions
- f) To build up socio-ecological development through the design and practical implementation of concrete models of integrated, self-sustained and self-

¹ Opus cit., p. 41

managed ecological communities, bio-regionally organized.

g) REAL aims towards living in harmony with ourselves as a primary pre-condition for living in harmony with others and with Nature.

(2) REAL Goals:

a) To protect the balance of Nature to which humanity and each, unique individual, is essentially interconnected and indissolubly interdependent.

b) To encourage, to promote and to facilitate on a national scale, a collective learning process of the community towards awareness, consciousness and actions, enabling people to arrive at the paths "Toward an Ecological Society", whereby people may live in harmony with themselves, others and with Nature.

c) To demonstrate non-polluting methods and eco-technologies towards the implementation of integrated eco-systems for sustainable development of the community.

d) To train people to become "multiplying agents" of REAL processes, adapted to the local reality and the needs of learning of children, young, and adults, people with specific disabilities and people confined (jail or hospitals), through pilot- projects in the community. The process of learning of involve: Socio-ecological awareness and consciousness, knowledge and skills. Environmental and Conservationist attitudes and values.

e) To develop practical actions towards a balance of the communities and their environments for a better and healthier human life. Challenging any form of

exploitation, manipulation or oppression of People and Nature.

f) To design and implement educational centers, communities for the research, training on ecological methods and techniques and demonstration of small-scale, self-reliant integrated eco-systems for the production of what is necessary to fulfill human needs such as food, energy, shelter and learning.

(3) Context: Method of Adult Learning:

I have based my educational work on the innovative experiences of individual and collective learning at the Simon Rodriguez University. The only "nucleus" (campus) that continues under the original guidelines of the foundation of the university in 1973, is Nucleus 1 or "Center for the Experimentation Of Permanent Learning" which combines principles of : participatory research¹, for empowerment of the participants and the "radical" traditions of Ivan Illich and Paulo Freire². As it has been explained in chapter one, the above experiences in adult education were also combined with the educational insight which I developed as a learner with my "model-teachers" who were: firstly, my dance teachers; secondly, some exceptional teachers that changed my life opening

¹ See Tandon, R., Participatory Research in the Empowerment of People, p. 20 In: "Convergence". Vol XIV, NO 3, 1981; Hall, B., Participatory Research, Popular Knowledge and Power: A Personal Reflection, p. 6 In: "Convergence". Vol. XIV NO 3, 1981

² See: Segovia, Lucio & Farias, Isaura., 1979

paths of permanent quest for experiential knowledge during the years of schooling: at primary, secondary and tertiary schools; thirdly my wise teachers of organic, bio-dynamic, biological agriculture and social ecology in the United States. The REAL "Method of Adult Learning" combines all those life-experiences as an adult learner. REAL considers that learning is a permanent personal, individual as well as collective, self-directed and creative process towards socio-ecological change and for individual self-fulfillment.

After participating in REAL processes, the individuals would be able to design their own plans for the attainment of new knowledge, to define their own aims, goals and specific objectives, to choose their learning activities, to find sources of information, to use available resources, to apply theory into practice, to practice critical and constructive analysis and to evaluate themselves, others and the REAL projects. Nevertheless, REAL could be sometimes limited in its quests for real participation and the development of a non-hierarchical and face to face democracy within the group. Limited by the passive attitudes, the submissive (or oppressive) tendencies, lack of initiative and irresponsible positions that some adults bring to the group process. Their assumptions, beliefs and attitudes have been nourished by the strict hierarchy of power submission within their own families or by the traditional schooling system of education of

"transmitters" and "receptors". Years of schooling could bring in an adult stage, a permanent dualistic and oppositional pattern of interaction between adults:

"Transmitter-Receptor"

A passive, unidirectional relationship

Teacher (authority)=
"active transmitter"

Student, pupil, trainee=
"passive receptor"

* I am your teacher
You are my student

* Yes. You are.
I am Your student

* I am the giver of
information.

* Yes, you are. I am waiting
for you to give me the
information.

* I know, you don't

* Yes, You know,. I don't.

* I can teach you. I decide
what, why, when, how, and
for which means you have
to learn.

* Yes, you teach me and
and you take all decisions
regarding myself and my
process of learning.

* I can judge you and decide
if you are learning or not
I can measure until which
extent you are learning.

* Yes, you can judge me.
I do not know what I know
so you decide this for me.

The above assumptions, habits and attitudes are challenged in REAL contexts of learning. Participants are encouraged to interact and to assume responsibility of their own process of learning: firstly, through the selection of individual projects that they will present to others at the last stages of the REAL process or projects in pairs or in small teams of three to five people maximum. They are able to decide: "what", "why", "when", and "how" to learn. Adults have the opportunity to experience a new educational environment, in a dynamic

situation of interactions where everybody becomes a participant and everybody becomes a facilitator of other people's learning. Where the teams share responsibilities solving problems and working together.

(1) Method of Learning: Areas of Learning Activity

The REAL Method of Learning is centered around areas of learning activities categorized as follows:

- a) Living Knowledge Activities.
- b) Theoretical development.
- c) Work in teams and group.
- d) Creativity development.
- e) Critical Analysis.
- f) Evaluation (Self-Team-Project).

a) **Living Knowledge** activities means to come within the physical reality: natural environments or social, economic, cultural environments, as an Observer/participant, with a conscious predisposition to learn from specific experiences within the reality. Some of these experiences are not of an intellectual nature, being more related with sensations, feelings, subjectivity and contemplation. Some other experiences are of an inter personal nature, more related with spontaneous questions to people visited; or observation experiences of models and demonstrations. Three main modalities of Living Knowledge are: sensorial perception activities, exploration of space and time and learning from the community.

The learning process of Living Knowledge includes: activities of *sensory perception*, which concentrates the attention on only one of the senses of sight, smell, touch, taste, hearing, kinetic. The *exploration of space and time* through our senses, is highly neglected by the schooling system¹; hence, many adults participating in REAL reflect a lack of experience in the use of their senses, because they are used to mainly rely on sight. "Blind exercises" enables the individual to concentrate in the other senses. For example: in the "Exploring for weeds" exercise, silent couples explore a garden or a paddock collecting weeds; one of them, plays the role of being "blind", while the other -"sighted"-guide the person through the fields, while collecting different weeds for later identification in the classroom. The

¹ More in New Zealand than in Venezuela. In the last three years of primary school, I attended the "Escuela Experimental Venezuela" (Experimental School of Venezuela), which was based on active principles of education of Maria Montessori and progressive and child-centered approaches to education of Froebel, Pestalozzi and Froebel. These "revolutionary" principles were introduced in the forties by Chilean and Argentinean educators around in the new democratic Venezuela and our school functioned as a government for a "free, democratic republic" where we, the children, became ministers, presidents and diplomatic ambassadors. I was selected once, as the "minister of agriculture" in my classroom, responsible of the gardens of the fourth grade. Our education also involved tasting, smelling, touching, hearing, observing and movement. These educational approaches were incorporated through many primary schools in Venezuela, during the process of building up the democratic system. None of the adults that attended SEAL courses in New Zealand have had these experiences as children in their schools, but they were providing different opportunities for their own children through home parenting, or "Rudolf Steiner Schools".

exercise promotes cooperation and trust between the people. The selection of the "blind" and "sighted" are as follows: the group is divided in two groups of equal numbers; half -"the blind"-, go to the center of a circle made up by the "sighted", who will select a person holding her or his arm and start to walk slowly; the couple do not talk and after 20 or 30 minutes they stop the exercise and is then when the blind person recognize the other. Then the process is repeated changing roles.

A different sensorial perception activity aims to reinforce the ecological principle of the "Soil-Plant Organism" relationship, going in small teams of three people to collect a slice, shovel-size, of a particular soil sample: clay, sand, topsoil, subsoil, compost. They bring the samples to the classroom in packets of newspaper, put them on a big table and walking around with their eyes closed, they are invited to touch, smell and taste¹ the different textures, aromas and flavors (for acidity alkalinity) of soils; some questions to the group bring up a collective conscious categorization of the samples deciding by logic, the vertical re-arrangement of the samples according to the natural order

¹ Some people strongly react to the idea of tasting soils, a very old traditional way of peasants and farmers to know if the soil is acidic or alkaline. Some few also react when they see me touching manures or measuring the temperature of the compost pile with my bare hands and some find bizarre to taste weeds and grasses. Until they get used to it and find it "normal". For example, in the last course a group were delighted when they saw me tasting the delicious silage of the bio-dynamic farmer Ian Henderson (north Canterbury), and some decided to try too.

of layers from the topsoil to subsoil.

In this category of sensorial perception I also include activities such as exploring a native bush for a living experience of the ecological principle of the "Law of Return". Before arriving, the people are invited to go "inside" the ecosystem without talking at all. All senses must be alert to discover any previous human activity in the bush (littering, for example), or the different stages of formation of humus, or the patterns of leaves around the dripping ring or shadow circles that surround each tree; with their eyes closed, people explore the textures of the soil litter and the smell of the humus decomposing underneath; to listen to natural and human made sounds. Some experiences at the edge of the bush, then invite to concentrate their attention in sensations on the skin of the wind or sun/shadow temperatures, changing positions within and outside the vegetative cover.

After many years of working with adults going through the same learning experiences, I have concluded that some sensorial experiences in REAL reveal an invisible instinct or maybe a cultural fear of death; some people feel repugnance at the sight of maggots in the sludge, moving larvae floating in the water ²⁵⁷, or

²⁵⁷ In New Zealand, I was surprised to hear the expression "Oh, yuck!" in some participants at the sight of manures. In my culture such an expression do not have any sense or value. Gradually, the understanding of anaerobic processes of decomposition of organic matter -

anaerobic (with no air) decomposition processes of organic matter. The participants are invited to recognize the smells of the different stages of decomposition in compost piles and to concentrate in observing the progressive changes in colour, texture, animal population and temperature (with their bare hands, comparing with thermometers).

Some experiences are related with the observation and collection of the most minute things, alive or dead that they could find in their own gardens or in the REAL site. The insight into an almost invisible world that is no so evident to our senses, will be later reinforced through the use of special audiovisuals on "the invisible world" with its images on elapsing time or thermal photography or special filming techniques that introduces our senses into the edges between matter and energy. Other experiences of living knowledge facilitate the understanding of the ecological principle of "cycles of life", such as to take a time sequence of pictures of a particular group of inter-related plants, through the different seasons, in order to perceive the not-so evident movements of plants through their life cycles and their form changes (or metamorphosis).

Beside the sensorial-perception process of "Living

which intrinsically relates with our internal process of decomposition-, becomes more acceptable to the individual and -eventually-the insight of death will relate with the insight of life.

Knowledge" activities, a different range of activities take place through field trips to natural eco-systems (forests, swamps, beaches, native bushes etc), to family organic and biodynamic gardens and backyards, to farms and orchards, parks, botanic gardens, nurseries, community organizations, research centers or industries, with observational strategies planned in advance. In REAL, the community is a open school; people and places chosen to be visited, are all sources of information relevant to REAL contents of learning. The personal approach between the participants and the people visited, is a colloquial exchange and not a distant interview or a formal check-up of questions and answers. These colloquial qualities are encouraged and emphasized since -eventually- the participants will have to work within the community and will need to develop communication skills at different levels.

"Living Knowledge" activities explore those places and situations where the participants could find real evidences of ecological chaos and destruction, such as endangered ecosystems (Trevor's Swamp, Huntsbury Hills, polluted rivers), chemical- mono-cultural farms, centers of scientific research dealing with genetic engineering and radioactive waste¹. For example, a short visit to the Metropolitan Transfer Station, reveals the hidden side of society: the "waste culture". In just minutes it is

¹ Which relates with the module on "Food Systems and Genetic Erosion"

possible to see how thousands of tonnes of rubbish are continuously dumped by the citizens, pushed and mixed by fast moving tractors, compacted into big trucks and, finally, sent to the land fill. In the mixture, fridge, chairs, carpets, tree branches, broken glasses, radios, shoes, sawdust and dust, all mixed together, is an expression of the absurdity of the "consumer's waste society".

The participants are invited to register their individual or collective learning experiences in a "field-diary", taking pictures or recording some sessions. This records are shared between the participants, sometimes to help somebody that was absent to keep up to date, or simply to compare and/or integrate all the different perceptions of the same reality, in order to plan for new learning activities by and for the team. Accumulated information during the "Living Knowledge" activities, is processed, organized and evaluated and, at the end of the course could be presented for audiovisual displays.

b) **Theoretical Development** activities. Any information interpreted, processed and presented by another person rather by than ourselves, is theoretical. Hence, in this category are included activities such as: formal lectures, collective reading, bibliographical research, search of printed material, films, videos, slides, or to listen to a public speaker. These

activities offer to the participants a point of view, assumptions , thoughts, conclusions, hypothesis in summary, an interpretation of the reality by other persons. One of the most important steps is to become an independent learner is to have access to a wide range of sources of information, to compare and to discriminate the theory raised by others, with the concrete reality, with our own practical experiences and with our own opinions and points of view. As REAL scrutinizes any effort which try to fit the dynamic reality into a theory:

The multimillionaire A.A. Stract had a house up in the mountain, with an immense window looking over one of the most beautiful and variable landscapes in the United States, and he used to spend hours sitting on his favorite chair in contemplation of the panorama. In order to get better concentration, he had drawn some rectangles on the glass- window and entitled them as: 'snow mountain', 'waterfall', 'prairie', 'forest', etc. His fortune was inherited by his daughter Faith, who venerated him to the point that she never dared to sit on his chair: she used to sit beside it, on a low tabouret. It cost her 68 million dollars to modify the landscape, in order to make it to coincide with the little squares of her dad¹.

The REAL participants will practice skills in order to be able to: find, record, resume, organize, analyses, evaluate and present information to others for individual and team projects; special reports on issues selected at the beginning of the course are presented for each individual at the end. REAL has organized in Venezuela through the network of public libraries, specialized

¹ Herrera Marcano, Luis., Miscelanea . Internal document for the participants of the Simon Rodriguez National Experimental University. Caracas, Venezuela, May, 1973.

"Corners of Consultation", "Banks of Learning Resources" and "Boxes of Information" for the use of the participants, including: printed material (books, periodicals, information brochures and leaflets), audio-visual material (slides, videos, films) and teaching aids such as teaching posters, overhead transparencies, cards, etc. In New Zealand, All these materials are under the care of the library of the Christchurch Polytechnic. The participants are given lists of classified bibliographical references as well as lists of sources of information and resources: human, technical, scientific, cultural, historical, educational and institutional. "Theoretical Development" activities, specially in Venezuela, has also encouraged participants to produce articles, posters, brochures, newsletters and their own teaching material on issues related to REAL.

c) **Practical Skills** activities. Physical work and outdoor activities are fundamental in REAL, for the application of theoretical knowledge in the practice. REAL theory must have an expression in the concrete world, in the ecosystems, in new forms of collective organization, through models, demonstrations and action. Participants in Venezuela and in New Zealand have built up different model centers and community pilot projects, while they have been learning new practical skills, working in team projects. The learning process of physical skills in REAL is not a rudimentary, repetitive or mechanical activity, but a very personal, dynamic and

creative process.

Each method of producing food, energy and shelter involves specific procedures and techniques which must be demonstrated in detail, repeating the procedure until it grasped to perfection by the participants. From how to handle, maintain and store tools correctly, to correct watering, planting, transplanting or pruning. How to organize a "Seed bank" to keep a record book of an account, or to sell vegetables. How to build a solar heater, make a shredder, build a "Lorena stove"¹ or to preserve and store food. For example, the techniques involved in the Indore method of composting involve multiple instructions and detailed step-by step procedure: the arrangement of materials in relation to Carbon Nitrogen Ratios, which means that the C/N of each organic material must be recognized. Any excess or lack of air, water, soil or manures, will determine the success or failure of the decomposition process. The Nitrogen content of different manures, the balanced succession of three stages, reflected in cycles of temperature; the size of the particles of organic matter; the frequency of aeration. (just to mention a few technical requirements). Totally different procedures will apply to the Templaieres Method of composting, which mathematical exactitude in the form and size of the

¹ A highly energy-efficient Guatemalan stove, which name means: LO (meaning "Lodo" or mud, clay) and "Arena" (meaning sand).

piles, have a symbolic meaning. Or the technique of double digging, for achieving permanent beds and permanent paths: beds are for the plant and paths are for the people, paying particular attention to the trapezoidal shape of the permanent bed in order to avoid water erosion. This involve to move the rake in a very special way, form both sides and lifting here and depressing there. Each one of the REAL skills on eco-technologies, requires special attention to individual needs. For example, design of their own gardens orchards, farms or community projects, involve many practical skills: not only observational skills for the ecological analysis of the site and its environmental diagnosis, but also to draw a succession on time of three or more detailed sketches or how to interpret a contour map.

Working in small teams in selected projects for application of practical skills, permit the participants to identify themselves with the environment of REAL headquarters. They work with soil, with materials considered "rubbish", some of them considered "taboo" by many, such as handling pig manure (for sealing the bottom of a pond for water purification). The participants not only sweat, face diverse climatic conditions such as hot sun, cold wind, heavy rain, sudden changes of temperature; they also lift heavy loads of diverse materials, manipulate heavy tools and equipment, stir liquid manures, garlic brews and other strong smelly substances. They cook, clean and organize shared meals.

The participants organize seminars, exhibits, public demonstrations, guide visitors on "eco-turistic" educational tours, contact local authorities, attend organizational meetings. They also develop teaching skills.

The REAL "Practical Skills Development" covers not only collective "group skills", working, deciding, creating and solving problems and internal conflicts; but also individual and personal aspects such as communication skills and self-assertiveness. To put REAL theory into practice, and practice into theory, means the discovery of the wonders of the living natural world, the "magic" process of growing food with non-polluting methods, the beauty of the macro and micro cosmos, the pleasure of harvesting the fruits of labor, the perception of forms and colours, the insight of expressions of dynamic forces in the natural world, the discovery of chaos and order, and the collective ability to change environments of death, pollution and ugliness, into environments of life, health and beauty.

d) **Work in Teams and Groups.** The first three group sessions are crucial for a good interaction between individuals, which- eventually will become a group. The role of the "facilitator" is to encourage, promote and assist individual and collective processes of learning. Her-his process start as a self-enquiry on: Who, Why, When, How and for which means I "am" a "facilitator"? or

an "adult educator"? or a "teacher"? Formal lectures are included in the structured stage of the course and, after the group is engaged in collective planning the people decide what they want to do (including formal lectures) and the participants start to "teach" others on a peer system.

At the beginning of the REAL process, the individuals are welcomed into a collective context facilitated by a person who tries to minimize being identified with authority, describing her-his temporary and rotational role as a group member with specific tasks, that-eventually will be shared with other members of the group. The initial interactions will permit a better understanding of the individual potential and also the creative potential of the group. An inventory of human resources lead to the identification of backgrounds, life skills, practical skills, knowledge and experiences that each adult bring to the group. Activities in this "introductory" category of adult learning, include: introductory circles, and trust exercises. The arrangement of the furniture (if any) and of the room must be non-hierarchical, and each individual must be able to see all the faces of people sitting in the circle to her/his right and left sides. After the initial welcoming and initial explanations of REAL and the course some initial time-tables for the first two weeks, showing optional activities for rainy, cold days and for sunny days are distributed between the

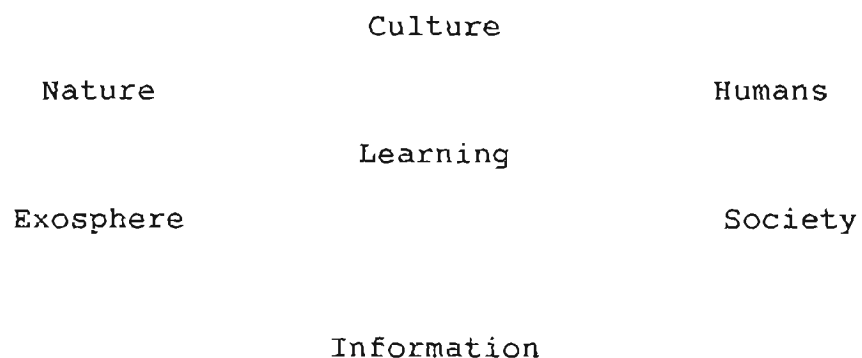
participants. They are invited to introduce themselves to the person next to their right (or left). After thirty minutes they will introduce each other to the group: name, geographical, cultural origin, previous learning-work experiences, interests and hobbies and possible experiences of participation in other collective processes, and association to any community organization. After this first "circular interaction", each person will individually express to the group why they become interested in the course (motives), what her-his expectations are and what possible areas of knowledge they prefer. There is a pause for refreshments and informal gathering of people, followed by a tour of "Living Knowledge" of the environments where the group will develop their REAL activities introducing the people to the human, physical and institutional resources. "Living Knowledge" of the community around the headquarters are also included in the first stages. The introduction to the "Method of Adult Learning", during the first two weeks includes a balanced distribution of a varied range of learning activities. The small teams (of three to five participants), start to solve problems, take decisions, to administrate available resources and to decide on the time table or internal rules (do not smoke, to call each other if the person could not come that day). Maintenance tasks are shared by all the participants on a rotational basis, including washing dishes and tidying up the classroom.

The dynamic interaction between individuals will determine different roles, the composition of the teams and the levels of responsibility and self-management. The interaction between the teams evolves in group situations for dialogue (see e. "Critical Analysis" and "Evaluation" activities. Some group sessions are dedicated to exchange of information and experiences and to share, where selected team-representatives reports back to the group a summary of the team actions, including achievements, needs and problems encountered. The educational practice is directly related with administration or management practices. In most of the courses, REAL empowered selected members -on a rotational basis- of the teams, to attend policy and administration meetings with external institutional authorities, at high levels of decision-taking. The most important effect of working in REAL team and group, is the friendship between people that remains after the course is finished. All REAL efforts to bring up a non-hierarchical environment where each individual has the opportunity to practice the exercise of freedom, to think and to act on equalitarian basis, does not mean that everybody is equally uniformed. On the contrary: the diversity of individual adults who bring to the group different levels of expertise and different skills will be expressed at different levels of leadership. Conflict, if it arises, is resolved between the people involved normally between two people or two teams, rarely involving the group. Always the wholeness of the group was strong enough to

cope with internal tensions between members and to overcome external pressures. I could not affirm, though, that if the REAL experience was stretched over time it would continue having the same characteristics of unity in diversity. The longest REAL experience has been confronted by the group at the Caricuao Center, in Venezuela, working uninterruptedly since 1979 until today. People have changed, but "the group" continues.

Context: Humans, Ecosphere, Culture, Information
Interaction. Centered on Learning

The Socio Ecological approach to Nature, Society, Culture and Human Nature, start as a collective quest. It takes three or more sessions up to a week to develop a collective insight into the context. Using a model, many questions are asked within the group of participants that brings the group to find their own definitions:



Some possible questions to the group would be: What is the meaning of each concept? How did Nature originate and unfold? Is Nature organized or chaotic? What is the difference between Creationism and Evolutionism? How did

humans lived in Prehistoric times? What is "culture" and how it relates to Nature? Did humans compete with Nature in prehistorical societies? How were societies in ancient times? Do you know how pastoralist and agricultural societies evolved?

Context: Ecological Principles

The REAL ecological philosophy is based on 5 ecological universal principles. REAL participants explore, observe, analyze and understand these principles, in order to develop an ecological culture closely integrated with the eco-systems. The ecological principles which are defined as "Laws", are applied in the practice and the everyday life of the individual. Each one of my organic, Bio-dynamic and socio-ecological teachers in the U.S.A., 1976-1977, had a particular ecological philosophy and in their teachings, they emphasized in one or more of the following principles, that I have integrated with REAL:

"Law of Interdependence of Life Cycles"¹:

Each individual (organism), accomplishes a cycle of birth, life, development, reproduction, declination and death. Each cycle is linked with and inter dependant upon other multiple cycles of life through webs of energy and flowing cycles of nutrients and in relationship with a particular non-living environment, making up an eco-

¹ Mr. Dick Falkestein, Bio-dynamic teacher:Koinonia Community, Baltimore.

system. This inter-dependence is organized through an integrated, non hierarchical network of: organisms, populations, communities and eco-systems, being the Exosphere, the totality of life on planet Earth. The eco-systems are always in constant process of transformation, tend to maintain a continuous state and to preserve their own integrity through multiple interconnections and self-regulation acts.

Hence: what affect the individual, effect the ecosystem and what affect the ecosystem on the totality of Life.

Examples of practical applications:

The "Recycling Culture" in opposition to the "Waste Culture", through the "Three R's" and the three "A's". *Recovering* inorganic waste materials-(plastics, metals, rubber) and organic matter through a process of classification of rubbish. *Recycling* in order to start a new cycle of use of the object of the material. *Return* of all organic matter to the living soil that originated it. And *Art, Architecture and Art-craft* with waste materials.

Garden design according to a succession of life cycles of plants, which enables to have a continuous supply of food in an uninterrupted sequence through the seasonal cycles.

"Law of Return"¹:

Most organisms, having accomplished their life-cycles, falls down **on top of** the soil where they decay and gradually decompose at different levels, becoming humus. These stages of decomposition of organic matter into humus, are highly organized.

The life principle of the humidification process is the essential condition for a real, natural soil fertility and health, transmitted to the plants which feed on the living soil and to the animals which feed on the plants. The more alive the soil, the more fertile it is.

Hence, once accomplished their live cycles, organisms must return to the soil.

Examples of practical applications:

17 techniques of making "compost": humus made by humans in imitation of the Law of Return. The composting process highly decomposes organic matter through a methodical aerobic process. Each method of non-polluting agriculture have developed its own techniques of making compost.

¹ Mr. Lee MacComb, Commercial Organic Grower of Citrus fruit and Manufacturer of Compost. Leesburg, Florida.

"Law of Soil-Plant Organism"¹:

Soil and plant form an indissoluble unity and can not be separated. At the level of the ryzhosphere they are essentially inter-connected through a permanent ecological cycle of exchange of living humic substances and root exudations which attract specific micro-organisms that live in symbiosis with that particular plant, while repelling other micro-organisms, that maybe attractive to a different plant. The exchange of living substances, nutrients and energy between the soil and the roots of the plants, is microscopically interconnected by specific bacterial flora and is determined through symbiosis.

The order and levels of organization of the humidification process starts mainly on the top-soil level and continues with more advanced stages of decomposition of organic matter in a downwards direction; each gradual process of decomposition of humus performs specific functions and it could be compared with an organ. In summary, the levels of organization of the "organism: Soil-Plant" are in itself an ecosystem, which performs as a highly complex organism with organs and functions, similar to the digestive system of animals (See REAL poster: "Soil-Plant Relationship").

Hence, the disruption of the relationship or the

¹ Mr. Dick Falkestein (82 years old Bio-Dynamic teacher)

isolation of its components, will cause death of the organism Soil-Plant.

Example of Practical application:

Six techniques of permanent mulch, which are applied on top of the soil.

Green manures, which incorporate fresh, green vegetable matter on top of the soil.

Do not do any tillage.

To cut and let the roots of crops or roots of some humus forming weeds to decompose in the soil and without removing the tops of the plants.

To protect the ridges of the mountains planting trees and bushes.

"Law of Diversity"¹:

The more balanced multiplicity and abundance of species-populations and the more complex webs of inter-relationships between them in an eco-system, the more balanced, stable and resistant to changes and stress the system is. Diversity contributes to the permanency and stability of the eco-system.

Examples of practical applications:

True Polyculture Versus Mono-culture.

Design according to five criteria for Companion Planting (Botanical Family, PH, Sun/Shadow relationship, Cycles of life, Nutrient intake by levels of root depths and forms)

¹ All the teachers emphasized on this principle.

Design of eco-villages and eco-communities, Bio-regionally integrated and organized.

*"Law of Entropy"*¹.

The first law of Thermodynamics (see note 24), states that Energy can not be created or destroyed but converted from one form to another. The second law or Entropy, states that during the conversion process from one form of Energy into another form, there is always a degradation, dissipation and loss of energy: from an organized state into a chaotic state; from an available form into an unavailable random form. The relative disorder being measured by entropy. Hence, the conservation, concentration and availability of energy depends on highly ordered, close, low entropy systems that maintain a balance of energy inputs and outputs.

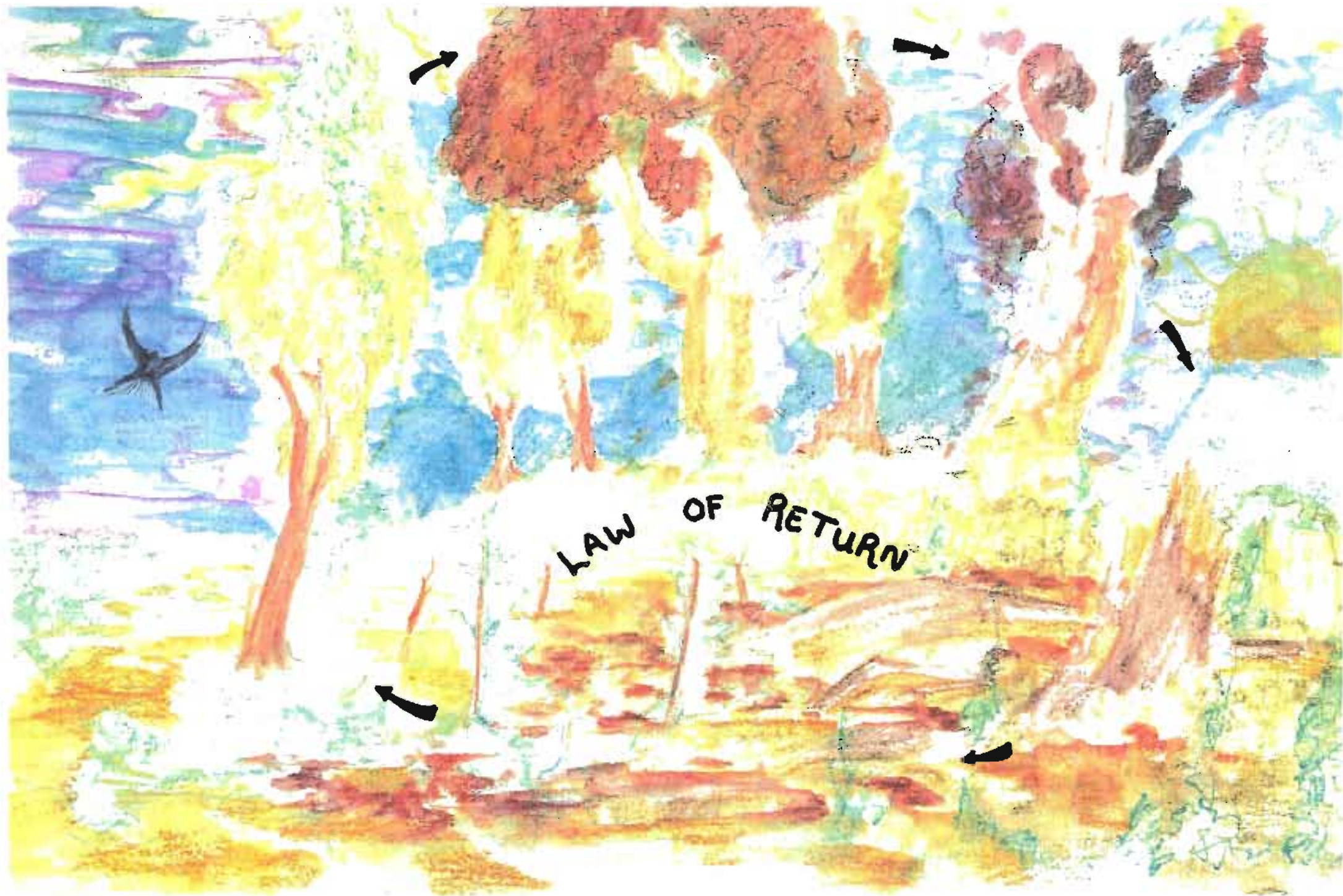
Examples of practical application:

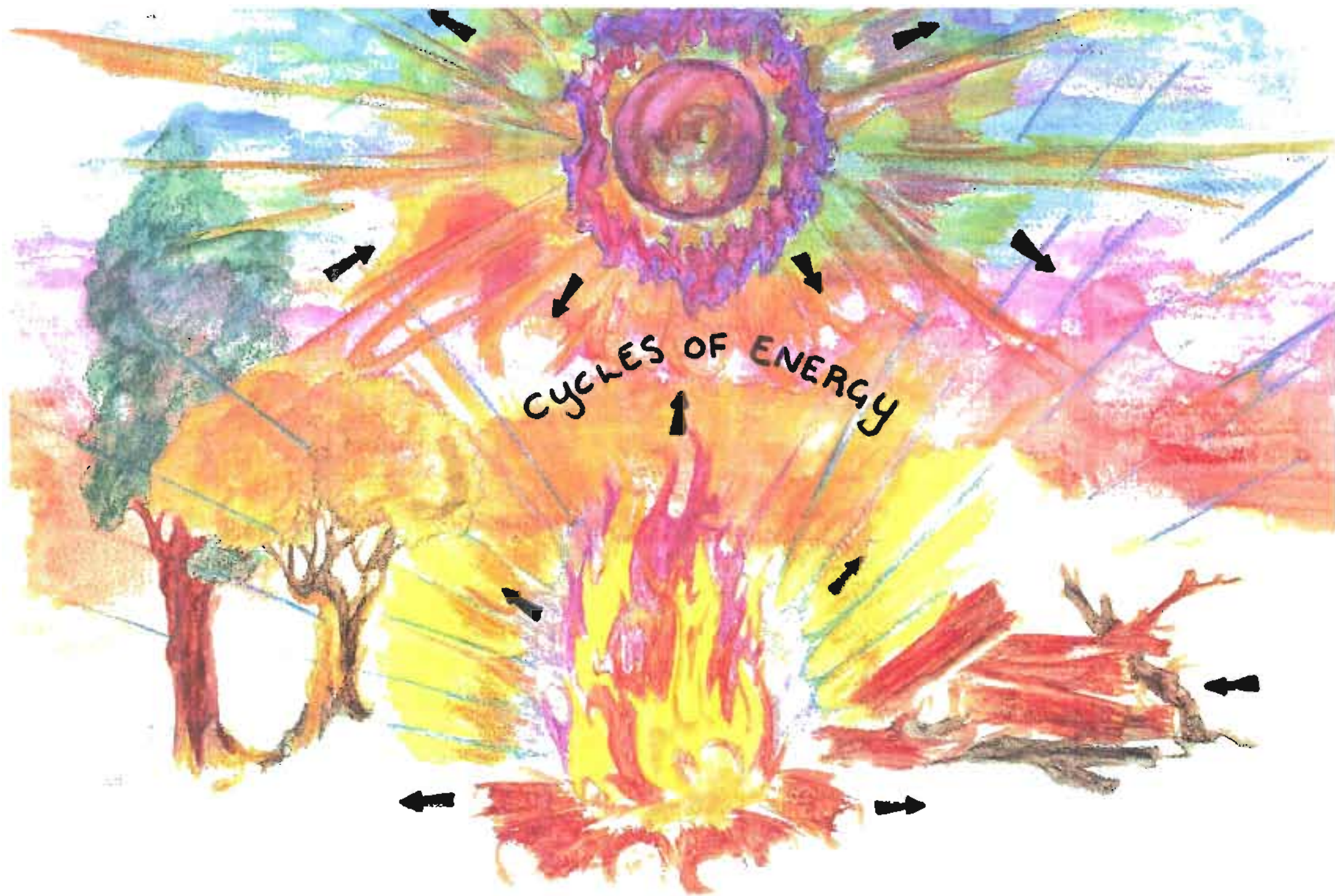
Socio-Ecological design for people living in urban or rural areas, integrating low Entropy systems for the sustainable, non-polluting, permanent and renewable production of: food, energy, shelter, transport, fiber and everything necessary for the community.

Projects on Eco-technologies.

¹ Mr. James H. Fowler, who always challenged the waste of energy of the system of chemical agriculture, the waste of water, claiming for the activated sludge. Warning about the manipulation of hybrid seeds by Multinational Corporations.

Also, Mr. Charles Woodard, at Goddard College in Vermont. In his teaching he explained the process of conversion of energy in the compost pile, he introduced the group into models and projects made by other students on solar, wind, water, methane and pedal energy, including solar houses and greenhouses, solar dehydrators, wind generators.





Technologies for the decentralized production of clean and renewable energies such as: sun, wind, water, methane, pedal and human energy.

Context: CONTENTS OF LEARNING

Conventional adult educational plans, programmes and curriculums, try to anticipate learning within a structured and regulated context and a predetermined period of time in a particular space "...low in their change of goals and are located at the formal system pole of the program control continuum. This is where most traditional adult education takes place in formal educational systems, in business in the military and the like"¹.

In REAL, the conception of such curriculums is flexible, leaving ample margin for errors, chance, randomness, and the possibility of more than one alternative. For REAL they are tools, but the everyday reality, the natural and human made environment in a constant, dynamic process of change is also a tool for learning. All the participants are learning resources in themselves as well as people and organizations in the community (See Living Knowledge). Having different backgrounds, life experiences and maybe cultures, they share their collective learning process, while the

¹ Paulston & Altenbaugh, Adult Education in radical US Social and Ethnic Movements" from case Studies to Typology to Explanation, p. 117

individual develop their own personal creative potential and self-expression.

I have noticed that adult-participants with Marxist or socialist backgrounds, were active in the discussions and the analysis of the hierarchical contexts of ecological and social oppression; Nevertheless, in their discussions they reflect the biased limitations of Marxist "economic" thought, "towards socialism" and the dogmas of "class-labor" analysis. The REAL approach instead, opens the analysis towards a new historical, social and cultural insight, looking at the inter-relationships between Humans, Culture, Eco-Sphere, Learning and Information. REAL analysis is seen in the context of the hierarchy between nations, within each nation, within the regions, within the local community and within the family. Hierarchy could be seen in terms of sex, economy, class, gender, age, ethnic group, and special attention is paid to the superiority of People over Nature. Finally, REAL start within the individual "I". I can not care for anything and for anybody if I do not care for myself first and, inside my skin, I have my own "Exosphere" to protect.

g) REAL contents or "Curriculum":

"Garbage is a Treasure": Recycling Culture in replacement of the "Consumerist-Waste Culture", through three "A's" : Art, Artisan-crafts and Architecture with recycled materials and the three "R's": Recovering, Recycling of materials considered "waste" and Return of organic matter to the soil where it originated.

"Non-Polluting Methods of Gardening and Farming":

historical, scientific, philosophical and practical basis of fourteen methods known as:

"Organic" (Sir A. Howard, J.A. Rodale);
 "Bio-Dynamic" (Rudolf Steiner, E. Pfeiffer));
 "French-Intensive" (Alan Chadwick);
 "Muller-Rusch" or "Biological Conception of Soil";
 "Lemaire-Boucher" or "Lito-Tamne Cal-Ma-Gol";
 "Jean Pain" or "Templaires Order Method";
 "Non-Tillage" of Edward H. Faulkner;
 "No-Work" of Ruth Stout;
 "Permanent Mulch" (King, Guest and Chase);
 "Sea Energy Agriculture" (Dr. Manard Murray),
 "Fourteen Days", California University (Gouleke);
 "Method of the Good Gardeners" (W.E. Shewell Cooper);
 "Organic Hydroponics" (Miranda Smith, Canada and others);
 "Electro-culture and Magnetism in Agriculture"¹.

These non-polluting methods of gardening and farming, could be adapted to local needs and applied on small scale for the production of food, medicine, fibre, timber and bio-mass.

"Food for Everyone"², was mainly based on the guidelines of Frances Moore Lappe and "Food First"³: food preservation, preparation, food storage and cooperatives. Health and nutrition principles. Critical awareness of the consumers on food chains and food systems. "Consumer-Actions" at a neighborhood or community levels, for collective pressure to lower food costs and for boycotting the rise of food costs. Food Cooperatives.

"Renewable Sources of Energy": decentralized, non-polluting and integrated systems of energy on a local, bio-regional scale such as: solar, wind, water, methane gas, compost toilets, pedal, etc., to replace

¹ In New Zealand, I also included in REAL courses, the "Esther Deans" method, "Natural Farming System" of Masunobu Fukuoka and "Permaculture" of Bill Mollison.

² It was based on past experiences, as a participant in workshops on "Food For All With Dignity!" of Francis Moore Lappe when I was a student of Mr. Jim Fowler at Denver Free University, in 1976. Other experiences I had on food self-reliance were: a) to participate in collective cooking, food preservation and storage, while living in Denver, Colorado and in "Koinonia Community" Baltimore, Maryland. b) to be a consumer of different food cooperatives and to live and learn with a woman actively involved in a network of health food cooperatives in Vermont, 1977.

³ See: Moore, L.F. & Collins J. Food First. Beyond the Myth of Scarcity, 1987

centralized and polluting systems of energy: fossil, atomic or hydro-electrical.

"Toward an Ecological Society": implementation of "Pilot Projects in the Community". Collective organization, decentralized self-reliance of the communities bio-regionally organized. Local, national and international network, cooperation and exchange (See Plate 5: REAL teaching poster "Toward an Ecological Society")

REAL Actions¹:

"Pilot Projects" and "Regional Organization" for sponsoring community actions adapted to local needs;

"Media as Educational Agents";

"Inter-institutional Cooperation and Exchange".

"Local, National and International Networking";

"Dissemination of REAL Information" (mass media, AV production, film, TV)

"Corners of Learning": specially identified shelves in each public library, provided the "multiplying agents with selected bibliography, teaching materials and audiovisuals; the teaching materials would be distributed free of charge to the teachers, through the national network of public libraries.

¹ See Chapter Five

Personal Introductions

1. Evidences

Brief historical review, Problems of conservation. Air, water, soil pollution. Forest destruction. Food struggle, World population. Conflicts, Urban-Rural dichotomy, Over-under development. Environment and development.

3

PRODUCTION

2. The Training Course

Aims, Objectives (General, specific). Methodology of Learning, Contents of Learning, Activities, Evaluation Process, Timetable, Recommendations.

1

3. An educational centre for the community

The design, establishment, management and maintenance of an educational centre for the community, research, training and demonstration of methods, techniques and models toward a permanent, integrated, self reliant productive eco-system, to fullfill human needs in harmony with nature.

2

The recovery of "wasted" land. Implication of this for participants. Roles and Responsibilities.

4. Basic Understanding. Glossary of terms

Energy, Energy Laws, Natural Cycles (water,carbon,nitrogen,phosphorous, cycles) Life, Photosynthesis and plants, Protein, structure and functions, metabolic diversity (nutrition,respiration,fermentation process) Life support systems, Biosphere, Environment, Habitat, Relationships between species, population, communities, Food chains and webs, natural resources (Water, Air, Soil, Coastal Systems, wetland systems, Forest, scrub, grassland) New Zealand'sconservation of natural resources, Problems & Strategies.

10

5. Internal Organization

Individual and team projects, Work in teams, solving problems, making decisions, producing together. Critical analysis and continuous evaluation process. Field research, Personal skills, Group Dynamics, Projects presentation, Expectations, Sources of Information, Resources References, Bibliography.

3

"Introduction" sub total

16

I	Understanding Wastes	Wastes, Definitions, Categories, the problem of littering. The Clean Community System, Wastes in the Industrial Society. Diagnosis and classification of Wastes, the recycling culture, "There is a Treasure in Wastes". Three A's - Art, Artcraft, Architecture - and Three R's - Recycling, Recovery, Return, with materials considered wastes.	4
I	Introduction to Concepts and Terminology	Theoretical frame and socio-historical contexts of food production systems: "conventional", "chemical", "synthetic". Agriculture: "non-polluting" methods of gardening and farming. "Biological" Agriculture, General Principles, Scientific Basis. The living soil: Biological conception, Organic matter, Humus, compost, organic anaerobic fertilizers, protective mulch, natural mineral fertilizers, green manures, companion planting, non-polluting insect control. Team Projects: Eco-systems - Plans and Strategies.	15
II	Food production with non-polluting, environmentally sound methods and techniques	1. Based on the Law of Return: Organic, Biodynamic, no tilling, Permanent mulch, French-intensive, Jean-Pain, Muller Rusch, Lemaire Boucher, (Lito-Tamme-Cal-Magol). The Good Gardeners. 2. Non-based on the Law of Return - Sea Energy Agriculture, seaweed extract, straw-bale culture, Organic Hydroponics, Bengali system, Electroculture. 3. Global conceptions - "Ecological", "Environmental", "Alternative", "Natural", "Appropriate", "Biological", Agriculture systems. Team Projects: 4. Skills, projects, models.	15
Units I, II, III: Sub-total -			34

Skills training in:-

* Aerobic processes:

Indore, Bio-dynamic, Good Gardeners, Quick Return, Jean-Pain, Seaweed compost, 14-day method, University of California, Roto drums, Sheet composting. Paper and cardboard, Dry toilets, Comfrey, Earthworm compost, Poultry (and other animals') compost.

10

* Anaerobic processes:

Organic preparations
Extracts
Methane gasdigesters

Team Projects

* Audio visuals

* Models display

Pre-evaluation, inventory and diagnosis of the area. Historical review. Maps, plans interpretations, Planning in time - space-resources.

20

Strategies: Dry eco-systems, humid eco-systems, wild eco-systems, protective barriers, inter-plantation, rotation, succession, companion planting, insect attracting/discouraging plants, the herb garden. Light, wind, rain, seasonal variables, macro-micro climate. Water sources and resources. Choosing and combining species, chains, webs, communities, population (spontaneous/introduced). Endangered species and natives protection. Animal population strategies: bees, earthworms, birds, etc.

Design sketches, subdivision of the available space. Diamond, tri-dimensional vertical design.

The edible landscape with
educational purposes

Models display and demonstration corners - e.g.:
"French-Intensive" permanent beds,
"Organic" garden,
"Organic matter" display,
"Mulches" display,
"No work" garden,
"Spirals" garden,
"Bio-dynamic" garden
"Chinampas", "Slope" garden, "Maori" garden,
"Natives and Endangered Species" strategies, etc.

Soil: Soil samples and tests, models display and demonstrations of
methods and techniques. Soil preparation: double digging, surface
composting, natural mineral sources, symbiotic organisms, inoculants,
legumes, green manures, extracts, preparations. Compost and mulches.

Greenhouses, tunnel houses, hot frames, plant reproduction, seeds,
seedlings, seed banks, soil mixtures, beds, trays, containers. Trans-
planting, weeds, insects, disease, deficiencies, identification,
diagnosis and control. Non-polluting techniques and procedures.
Preparations, juices, applications, traps and other devices.

Garden hygiene, pruning, quarantine, watering, irrigation, drainage,
water storage and recycling, ponds, tanks, water culture. Cloches,
frames, poles, living fences and other structures.

Tool management and care.

Team Projects:

Limited space and the urban environment: Gardening in containers.
Organic hydroponics and sea-energy hydroponics. Sprouts, the stamp-
garden, the no-work garden, the weekend garden; therapy gardening
for the elderly, intellectually handicapped children, prison inmates,
hospital patients.

The edible landscape

Team Projects:

- * Small - Business Projects
- Profitable Projects
- * Educational Projects - Therapy gardening for the handicapped
and the elderly.
- * Research Projects - Solar food dehydrators, Sprouting cabinet.
Food preservation and storage.
Lorena Stove. Solar water heaters?
Biological, energy-efficient shelter.
- * Audio visual projects.

<u>CONTENTS OF LEARNING</u>	<u>DESCRIPTION OF CONTENTS</u>	<u>NUMBER OF SESSIONS REQUIRED</u>
New Zealand pre-industrial life-styles.	* Maori, pre-european styles of life, food, shelter, energy, crafts, techniques, skills	8
Research Projects:	* The native environment of New Zealand	
	* The 19th century European life styles Self-sufficiency of the first settlers	
	* Impacts on the environment.	
Term Projects:	Evidences. Models for permanent display, demonstrations, Audio visuals	
Toward an Ecological Society	Principles of Eco-development, Integrating Conservation and Development Self-sufficiency and self reliance systems. Non-polluting systems of energy, integrated, local, decentralised, appropriate techniques (Solar, wind, water, pedal, methane). Community based organizations, Continuing education philosophy, projects	3
Introduction to Permaculture: Permanent, integrated and evolving eco-systems to fulfill human needs: (Bill Mollison ~ David Holmgren).	Permaculture:- definition, Aims , principles, permanent integrated eco-systems, to fulfill human needs: food, shelter, energy, fibre, timber, tans and dyes, Design for the rural or urban environment. The landscape analysis. Planning, Establishment, species selection, Zones and sectors. Biological resources, nutrient recycling. Management, Maintenance. The landscape, wasted land or difficult land recovery. Climate and microclimate structures. Waterworks, waterculture, small scale animal farming, Interaction and Association. Functional analysis, Sources of Information, Network, Bio-Regional Organisation.	10

		51
		UNITS IV, V, VI, VII
		Sub-total

complement- ary Workshops Invited Guests: Specialised lecturers)	1. Small Business Management	Business skills, Marketing yourself and your products.	3
	2. Co-operatives, Trusts, Clubs and Associations, Community Organizations	Aims and objectives, Organization and functions, Legal basis, requirements.	1
	3. Communication Skills	Effective speaking in public, Confidence and self-analysis, Memory improvement, Leadership training.	2
	4. Audio visual techniques and teaching aids	Photography skills, Recording, scripts, production, editing, Audio visual projects, blackboards, slide projectors, film projectors, Overhead projectors, Posters, maps, models, design. Printing, Photocopying, Stencil skills, newsletters, bulletins, promotional brochures, guided visit pamphlet. The media: T.V., cinema, newspapers as educational agents.	4
Workshops Sub-Total:			10
evaluation:	1. Projects Presentation	Each team presents the results of their projects.	
	2. Final Evaluation	Each individual presents the final report.	
	3. Civic Pride Campaign Committee: Ceremony for the presentation of Certificates to the participants.	Self-evaluation, team evaluation, Course Evaluation. Exam.: Promotion to advanced levels. Civic Pride Campaign Committee Certificate at the end of the Training Course (Christchurch City Council).	
confirmation the Training course and implementation the educational centre for the community.	During the course, the work skills training would be held mainly at the land approved for this Educational Model Garden Project by the Metropolitan Refuse Transfer Station at Dyers Road, with its evident effect of the landscape enhancement and beautification. After the final evaluation, the participants would start to work for the final implementation of the "Design of the Education Centre", which would be opened to the public once it is ready. This possibly would take 4-6 months. We will propose external evalu- ation from different educational authorities in order to determine the training course status and its recognition by the official educational system.		

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APPENDIX

FOUR SCHOOLS OF THOUGHT:

According to David G. Green in his book "The New Right" published in 1987, there are four distinctive categories of New Right thought, each one with its own pioneers, values, beliefs and assumptions:

- a) The Anarcho-Capitalist and the "Minimal State" version.
- b) The Chicago School
- c) The Austrian School
- d) The Public Choice School.

The articulation of the characteristics of the four categories will bring to our analysis five principles that could be used as key elements for the identification of New Right modes of thought, in documents or in oral interventions:

"Four Schools of New Right Thought"

(Based on data : Green, 1987)

NR SCHOOL	PIONEERS	HUMAN NATURE AND RIGHTS OF THE INDIVIDUAL
a)Anarcho-Capitalist	Murray Rothbard	-Individuals are intrinsically different. No equality. -Absolute "natural rights" of the individual.

David Friedman

- Each individual has absolute right to have private property, which includes own body and natural resources, right resources, right to homestead.
- Absolute freedom of speech, publication and assembly.
- Individuals have the right to pursue separate ends and voluntary agreements
- System of mutual protection and association of individuals through private policing and judicial system

b)Chicago Henry C. Simons

School: Frank H. Knight

"Objective George Stigler

Economy" Gary Becker

Ronald Coase

Milton Friedman

- Individual freedom requires elimination of the pursuit of equality of "outcome"
- Equality before law and equality of opportunity are compatible with freedom
- In a free capitalist society any disadvantaged individual can achieve privileges, richness, property.
- The "Profit Motive" is the main force that moves the individual into action.

c) The Austrian Friedrich von

School: Hayek

Freedom of the individual is the absences of coercion, nor the arbitrary "Subjective imposition of any will (individual or Economy" group), overriding the individual. Human Knowledge is limited. Individuals act in a particular way according to social rules, without knowing why or for what. Humans only have a partial and limited knowledge of the reality, without understanding the society as a whole.

Hence, the individuals, not knowing what their obligations are must not have moral obligations to the whole society; hence, there is no need to be altruistic.

SOCIO-ECONOMIC BASIS
SOCIAL SECURITY

STATE

ANARCHO-CAPITALIST

AIM 1: TO DISMANTLE THE STATE

Absolute freedom of exchange and freedom of contract or give away property (bequest)

- Absolutely no interference with property rights or free-market economy.
- Military conscription=massive slavery.
- State is repressive, centralist, oppressive and aggressive.

Society organized under a set of rules which regards individual private property as the basis of economy

- Taxation is robbery, hence all taxes must be abolished
- Eliminate laws and regulations that restrict peddling and street trading to give the poor opportunities to start own business.

Free-market is the source of wealth: what benefit the rich, will benefit the poor and rise the standard of living of everyone.

- Eliminate all subsidies of industrialists, farmers, beneficiaries of higher education
- Eliminate minimum wage
- Eliminate trade unions

AIM 2:

"Minimal State" Version:
The School of anarcho-capitalist aims to a total abolition of the state in favour of absolute "laissez faire", but it has a second version not- so radical which aims to a "Minimal State" and whose pioneers are Robert Nozick and Ayn Rands. They argue that the state is still needed for external defense and protection of individual rights. No single social order is the best for every one; hence, the minimal state serve as a framework for each inviolate individual with

individual rights, to convince others of their utopias about how to live voluntarily together. The code of values of one group defending altruism could be in detriment of other group. Human life is an end in itself and self-concern guiding rational choices is the highest moral virtue.
